MEDICAL RECORD

With man, most of his misfortunes are occasioned by man.

—Pliny the Elder

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Vol. 160, No. 8

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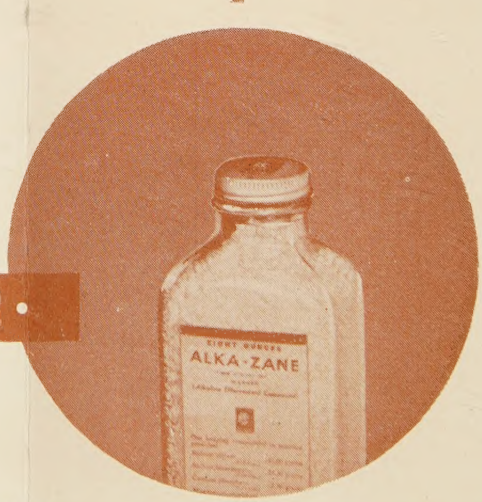

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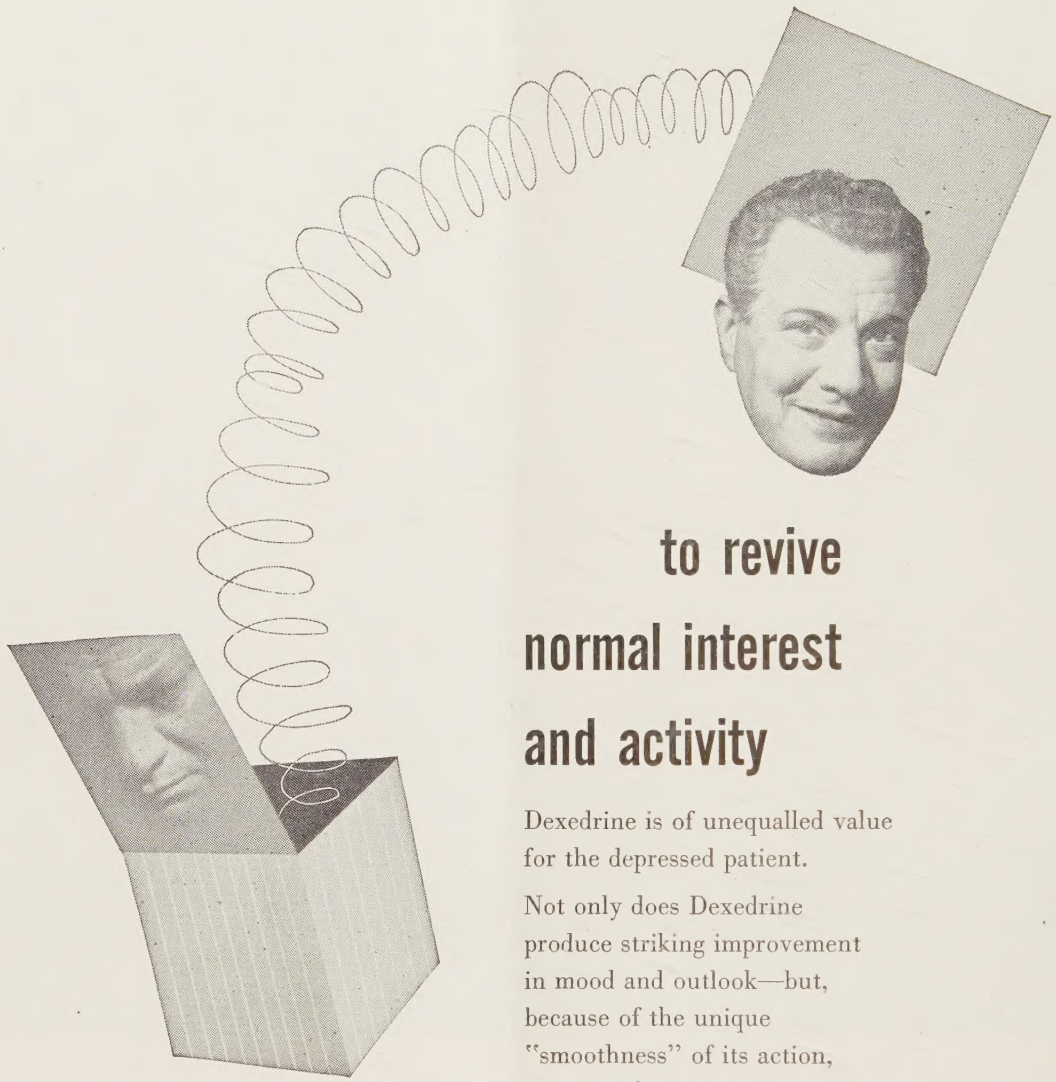

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Not only does Dexedrine produce striking improvement in mood and outlook—but, because of the unique "smoothness" of its action, it spares the patient the disturbing consciousness of "drug stimulation."
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AUGUST, 1947

OPEN FORUM 454

EDITORIALS 485

PAPERS AND ADDRESSES

Ethylene Disulphonate in Allergy
Clifford L. Bartlett, M. D., Pasadena, Calif. 467

Ethylene Disulphonate and the Allergic State
Valentina P. Wasson, M. D., New York, N. Y. 471

The Treatment of Carbuncles with Salicylic Acid
Carlo Savini, M. D., New York, N. Y. 477

Skeletal Changes Associated with the Use of Crystalline Chymotrypsin in an Apparently Radio-Resistant Growth
Ernst T. Krebs, M. D., Ernst T. Krebs, Jr. and Charles Gurchot, Ph. D., San Francisco, Calif. 479

The Front of the Foot
Leonard D. Frescoln, M. D., Philadelphia, Pa. 481

The Secret Instrument
Charles Hendley, M. D., Abilene, Texas 482

A Case of Rheumatoid Arthritis
Bendet Nelson, M. D., New York, N. Y. 484

SPECIAL ARTICLES

Letter from Britain
(From Our Own Correspondent) 493

The Secret of the Whale
T. Swann Harding, Falls Church, Va. 454

NEWS ITEMS 488

BOOK REVIEWS 495

SURGICAL DIGEST 499

MEDICOLEGAL NOTES 500

NEW PRODUCTS 510

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New Drug for Bronchial Asthma

A new sympathomimetic amine called Isuprel was described as "a valuable adjunct in the armamentarium of therapy for the distressing condition of asthma" by Maurice S. Segal, M. D., of Boston City Hospital, Boston, Mass., before the American College of Allergists.

In a joint paper with John F. Beakey, M. D., research fellow in medicine at Tufts College, Dr. Segal cited actual case histories to shed new rays of hope for all victims of this "common and frequently unrelenting disorder."

Research scientists in the laboratories of Frederick Stearns & Co. Division, Sterling Drug Inc., were first to synthesize and name the medicine in this country. In Europe, following independent research, the drug has been introduced as Aleudrin. Dr. Segal's and Dr. Beakey's paper marks the first clinical report so far as is known in the United States.

The two investigators reported on results of 187 trials in 82 ambulatory patients treated with Isuprel by oxygen-aerolization and in 40 hospitalized patients treated at Boston City Hospital by one route alone or a combination of routes, including oral administration of the new drug.

Forty patients were treated with Isuprel alone. They had a total of 55 admissions. A great many were in the severest stage of asthma when seen. The average duration of the condition was 13 years, ranging from 2 to 50 years.

Doctors Segal and Beakey reported that 85 percent of the severely ill hospital-treated patients were "kept comfortable by this drug alone." In terms of treated admissions, 80 percent were successful.

"Since with one exception, all the cases were either the intrinsic or mixed type of asthma, a notoriously treatment-resistant group, such a proportion of success is most gratifying," the paper stated.

"Twenty-seven patients during 37 admissions were quickly and markedly improved; 7 in as many admissions were moderately improved; 3 in as many admissions were slightly improved; and in one the results were equivocal; and 2 patients were classified as failures."

In regard to oral use of Isuprel, one of its advantages over other drugs, Drs. Segal and Beakey reported that it "may have a place in the management of the chronic asthmatic who wheezes every day but rarely has a severe attack."

In conclusion, they also stated that the fluctuations in blood pressure observed in asthmatics were "effectively abolished or markedly decreased in an especially dramatic fashion when the bronchospasm was greatest.

"Although the drug does not fundamentally alter the basic physio-pathology of bronchial asthma, it is a valuable adjunct in the armamentarium of therapy for this distressing condition."

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Open Forum

THE SECRET OF THE WHALE

T. SWANN HARDING
Falls Church, Va.

A New Jersey soil scientist, Firman E. Bear by name, goes around asking: "Why does a man die at the age of seventy-five?" From time to time he varies this by asking merely: "Why do men die?" Well, why do they? Why don't they live forever—or at least as long as the whale?

Obviously men have long wanted to live longer than they are accustomed to. They invent tall tales like that about Methuselah. They solemnly record the story of Thomas Parr, who was said to be one hundred fifty-two years of age at death. They tell eager myths about one Russian who attained the fabulous age of one hundred eighty-five, and of a happy married couple in which the wife was aged one hundred sixty-four and the husband one hundred seventy-two. The late Raymond Pearl would have dismissed all these stories as pseudo-scientific folklore.

Nevertheless trees have lived for thousands of years. Some are said to have attained the age of 5,000 years. However, a tree is not alive through and through. It is dead at the core though this dead wood is surrounded by living tissue, yet the oldest living cells of the oldest trees are probably not over a hundred years of age. Various investigators have made incredible claims for the longevity of microbes which they found in ancient bricks. By carefully sterilizing these, coating them in wax and breaking them with a sterile hammer, they found live bacteria inside which grew—after residing within a brick from Peru for 1,400 years or within a brick from Egypt for 4,000 years.

Some believe these stories, some do not. There is a fairly reliable record of one lower organism, a paramecium, which was bred for ten years through 8,000 generations and could doubtless have been kept going permanently. The live chicken cells which the late Alexis Carrel experimented with many years ago are still reproducing and flourishing. Furthermore the parrot, the pike, the crocodile, the tortoise, and the elephant actually do live very long lives for mammals.

The longest-lived of all is the whale, even though he does at times accumulate a weight of a hundred tons. How does the whale happen to be the longest-lived of mammals? What is the whale's secret? He cruises around in sea water all the time. Did he take to the water for a sound reason? Does he perhaps find therein some needful mineral element, largely denied humans, which prolongs his life? All the mineral elements he might want are in the sea, even the rarest.

Minerals play an important role in promoting the growth of plants, animals, and men. When deprived of certain minerals all vegetation and all animals, man included, sicken and even die. Is the secret of longevity here? Quite the contrary, holds a considerable group of students. They say that the early death of man is caused by the use of chemical fertilizers, wholly unnatural drugs which poison his food and ultimately carry him off. Let man fertilize his crops with natural manure or compost and all will be well.

The primary exponent of this creed is Ehrenfried Pfeiffer, a Swiss, whose masterpiece is a book on "biodynamic" farming and gardening. His theory is that manure promotes health, while chemical fertilizers drive away or destroy beneficial earthworms, bacteria, and fungi, and the other necessary life-giving substances in soils and plants. An international cult has been founded which holds to these articles of faith with veneration and fanaticism. Many books, articles, and addresses attest this.

To them, organic matter is the great and indispensable fertilizer. Manure enables plants and animals both to resist infections and attain longevity. They say that more people suffer from colds, decayed teeth, rheumatism, heart trouble, gall stones, ulcers, and cancer than ever before. People die younger than they used to, and it's all the fault of chemical fertilizers! Hence man cannot escape the dung heap. Without manure he perishes. So goes the doctrine.

Are manure and composted raw organic matter, like garbage, so highly superior as fertilizer to the chemicals sold commercially? Which came first, egg or chicken, mineral or vegetable? The great Justus von Liebig's predecessors contended that organic matter was necessarily the proper food for plants. However, Liebig pointed out that there must have been plants before there was humus or organic matter to fertilize them. For originally all the carbon, the main element in organic matter, must have been in the air as carbon dioxide.

In spite of that, primitive forms of life came into existence on this hard mineral earth. Higher forms gradually evolved. Today the new science of hydroponics has shown us how to raise excellent vegetables on an island composed of solid rock, like Ascension, using no earth and no organic matter at all. Soilless plant culture is practiced on a large scale commercially, just as botanists have long practiced it for experimental purposes.

The necessary chemicals are merely dissolved in water and this solution then flows through beds of sand, gravel, cinders or other inorganic matter in which the plants stand while growing. There is no humus, no organic matter, no manure. There are even no earthworms, indispensable as they are to agriculture according to some cultists. Yet the plants grow equal in size, appearance, and palatability to others grown in soil fertilized with manure. Seed selected from them yield identical plants generation after generation.

Of course organic matter has its place in the soil. Even earthworms are helpful in improving its physical quality. Organic matter aids in erosion control, serves as food for desirable micro-organisms, contains important major and minor elements left

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CLINICAL USE—Sopronol gives excellent results in tinea pedis. It does not cause "id" reactions (due to absorption of mycotic debris), which are likely to occur through use of agents with more violent action.

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behind in plant residues, and helps prevent water loss by evaporation. That makes chemical fertilizers neither undesirable nor unnatural, much less toxic.

The earth's surface consists mainly of rock. It contains the same chemicals as occur in chemical fertilizers. From these elements plants can synthesize the more complex organic molecules essential to the life of the animals which consume them. The physical properties of a soil are determined largely by its content of humus or organic matter. Composts and manures have their place in the scheme of fertilization, but they are not one bit more natural than nitrogen in the air, rock phosphate, lime, and certain potash salts, all of which occur in nature.

Some people are so constituted as to regard nitrogen of the air as beneficial if fixed by nitrifying bacteria or by legumes, but quite the reverse of that if fixed synthetically and applied as nitrates. This is like holding that a doctor should not prescribe synthetic vitamins and the salts of calcium for child patients who consume insufficient milk, fresh fruits and vegetables. For that matter a cow secretes about a hundred pounds of chemical fertilizer annually in her milk. It consists of the salts of calcium and phosphorus. Normally this milk, rich with minerals, leaves the farm and no amount of compost or manure can replace it.

The idea that the human race is more afflicted with disease since it began to use chemical fertilizers is short-sighted and fallacious. Such figures as we have indicate that longevity has increased in recent decades, and that many diseases which were formerly very prevalent are now quite rare. Meanwhile chemical fertilizers have enormously increased farm production. The world's population can only be provided an adequate diet by the use of more such fertilizer.

The earth's population of 1960 can only be fed adequately if all the arable land on the globe, that now cultivated and about 1.3 billion acres of tropical and north temperate zone land which could be tilled, is farmed intensively using much more fertilizer than now. Nitrates are readily available via nitrogen of the air, but we shall also need eight times as much phosphate and eighteen times as much potash as we now use for fertilizer.

It would not be unnatural to use it. For a hundred years experiments have been carried on in England where various plots of land under wheat have been treated with chemical fertilizers while others were treated only with manures. When he reviewed these experiments, Sir John Russell said that no organic manure had been found in which the nitrogen had higher value than in nitrate of soda. Humus improved the condition of the soil, but there was no evidence that organic manures had any special virtue either in increasing soil fertility or in improving the health or feeding value of crops.

There is nothing wrong with chemical fertilizers

THE CONSERVATION OF NERVE FORCE

In exalted states of the higher centres with dissipation of nervous energy, the use of

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exerts a marked influence in bringing the function of these centres to a normal level.

Pasadyne's potent therapeutic efficiency and its freedom from evil effects point to it as being the

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unless it be that they contain insufficient amounts of certain rarer minerals. In this connection it is of interest that thousands of tons of the rare or so-called trace elements are today being used to increase agricultural production.

Human beings absolutely require adequate supplies of such minerals as sodium, potassium, calcium, phosphorus, and iron. The first two are almost unavoidable, the last three a little more difficult to provide in the diet. Animals also appear to require iodine, copper, cobalt, manganese, zinc and, difficult as it is to credit, arsenic. Furthermore animal bodies contain aluminum, magnesium, tin, vanadium, bromine, boron, nickel, and mercury, though it is as yet uncertain just why.

There is bromine in our blood. In certain types of mental diseases the quantity normally present drops to half. It seems to be important but for reasons unknown. Fluorine and selenium can get into the human tissues but they are apparently undesired. Zinc may or may not be essential. Other mineral elements that appear from time to time in human tissues without full explanation are lithium, rubidium, caesium, barium, strontium, beryllium, silver, cadmium, mercury, silicon, germanium, lead, titanium, zirconium, cerium, thorium, antimony, bismuth, chromium, and molybdenum. Some of these are so rare you have probably never even heard of them. How important are they?

Who knows but what some one or more of these very rare elements may govern the length of man's life, an element that the whale readily finds in his watery home? No one knows. We know little enough about the function of such common elements as sodium and potassium in this connection. Surveys in different areas in the United States have demonstrated that plants and animals suffer from a considerable variety of ailments, each due to a deficiency or an excess of certain of the rare mineral elements. These surveys have been well tabulated. Food plants of the same kind also differ widely in their mineral content and fertilization has very little to do with this.

We may hope that our customary well-rounded diet will provide all the minerals we need, but we have no real assurance of this until a great deal more research has been completed. Authorities increasingly agree that the field of nutrition offers the most promising line of attack in extending man's life span. The life span of experimental animals has been remarkably extended by Sherman, McKay and others by variations in their rations. A deficiency in one or more of the minor elements, or a poor balance among the elements may prove the final key.

Diet evidently largely determines whether a man is young at sixty or senile at forty. Aging human beings generally tend to get too little calcium, iron, and protein in their diets, and too

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much starch and sugar. A quart of milk, daily, drunk as such or cooked into food, would provide the calcium needed. Eggs are rich in both calcium and phosphorus, as well as good protein, but they also contain a complex substance called cholesterol, too much of which seems to foster hardening of the arteries, high blood pressure, and circulatory diseases. If the blood is already high in cholesterol, eggs should be eaten sparingly.

Greens like dandelion, kale, watercress, turnip tops, lettuce, cabbage, broccoli and endive are generally superior in food value to beet tops, rhubarb, chard, or the much touted spinach. The calcium of spinach is poorly used by the body, and it contains minerals that prevent us from using it in other foods as we should. The calcium in all the following is well used: Celery, cabbage, Chinese cabbage, collards, kale, leeks, lettuce, rutabaga leaves, tendergreen, and turnip tops. The calcium content of carrots, lettuce, and snapbeans is actually utilized as well by the body as that contained in milk.

Meat, besides supplying excellent protein, provides iron and the vitamin B complex. In the main, liver extracts are helpful, if liver function is impaired. Traces of copper, molybdenum, cobalt, manganese and other rare elements help. Protein deficiency probably accounts for much of the liver, kidney, and blood disease among the aging. Even the heavy drinker can avoid cirrhosis of the liver if he consumes sufficient protein. While the aging should not overload themselves with protein, protein should not be denied even in arthritis, high blood pressure, and kidney disease.

As we age we should be sure to consume ample meat, milk, and legumes. Hydrochloric acid deficiency in the stomach affects forty percent of all people over sixty. It is much more common than so-called "acid stomach" and, since the symptoms are about the same, as recorded in the advertisements, many oldsters are doping on alkalies when their actual trouble is insufficient acid. Sufficient hydrochloric acid must be in the stomach to enable it to break proteins down, digesting them into amino acids. The deficiency is easily remedied.

The actual key to long life remains to be found, but the above suggestions should be helpful. The key to earthly immortality probably never will be found. Man seems born to die, however, he need not die so soon. Moreover, chemical fertilizers almost certainly are not killing him off, and he may find the secret of longevity at any time in some mineral element present only in merest traces. Even then the whales probably got theirs first!

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The use of GRAY'S COMPOUND will save valuable time and effort in the restoration of your patient to his normal health.

Gray's Compound

stimulates the appetite and aids in the assimilation of nourishment. If the patient is "run down" from overwork, worry, seasonal colds and coughs, or suffers from the vague symptoms of old age and diminishing vitality, GRAY'S COMPOUND is usually indicated, and is a useful adjunct to such other medications as the case may indicate.

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But is it? Thousands of men—and women—*and* children—*and infants*—find that every time they eat an orange, or drink orange juice, the orange "bites back."

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The *only* sodium ascorbate in dry form for oral administration, SODASCORBATE permits complete Vitamin C therapy without the gastric irritation or allergic side-reactions which so often result from ordinary ascorbic acid, whether in synthetic or natural form.

The average dose for adults and children over 12 years is one tablet t.i.d., or as indicated by the condition. For children under 12, one-half tablet t.i.d. This may be dissolved in milk for babies and young children.

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DOCTOR: A new physician's emblem for the windshield of your automobile. Yours on request. In writing, please mention this publication.

Unprecipitated Diphtheria Toxoid

According to **Health News,** the bulletin of the New York State Department of Health, after April 1, the general distribution of unprecipitated diphtheria toxoid through district laboratory supply stations was discontinued. This decision has been reached after careful consideration by the Divisions of Communicable Diseases and of Laboratories and Research. Two injections of 1.0 ml. each of the precipitated toxoid are required now for a locality to receive credit on the State Department of Health records for a diphtheria immunization. The response to two doses of this material is definitely superior to three of the unprecipitated preparation, both in initial response and in persistence of immunity, and disturbing reactions to either the initial or stimulating dose in persons up to fifteen or even eighteen years of age are unusual. Moreover, it is difficult to persuade parents to return to the later clinics so that the series of three injections required for the unprecipitated preparation may be completed.

Precipitated diphtheria toxoid is also recommended for use as a stimulating dose. Recent experience has indicated that a booster dose of 1 ml. prior to entering school is an essential part of the diphtheria prevention program. For additional booster doses, a reduced amount, even as small as 0.1 ml., will probably be satisfactory.

A supply of unprecipitated toxoid will be maintained at the Central Laboratory for special use, mainly for the immunization of those who are sensitive to diphtheria protein and of the older age groups, although there is little evidence that precipitated toxoid causes more severe reactions than the unprecipitated. In requesting the material, it would be appreciated if physicians would indicate reasons for preferring unprecipitated toxoid.

Advance in Treatment of Syphilis

Dr. Evan W. Thomas, at the annual meeting of the Women's Medical Association of New York City, stated that two weeks of properly given penicillin therapy is probably as effective as two years of weekly injections of drugs in the treatment of syphilis. Dr. Thomas is associate professor of medicine at the New York University College of Medicine, and director of the Rapid Treatment Center at Bellevue Hospital.

"The advent of quantitative serological tests for syphilis and penicillin for treatment have enormously improved the management of the disease", Dr. Thomas said. "This does not mean that penicillin is a panacea for syphilis or that we can yet dispense with all previous aids to therapy. But it does mean that we have made tremendous strides in the therapeutic control of this chronic disease".

. . . to relieve the strain of

CHRONIC IRREGULARITY

WHEN frequent aberrations of the menses suggest that normal function has overstepped the bounds of physiologic limits—the physician is often confronted with a condition which proves highly distressing to the patient.

For such cases (as in amenorrhea, dysmenorrhea, menorrhagia and metrorrhagia), many physicians rely on Ergoapiol (Smith) as the emmenagogue of choice. By its unique inclusion of all the alkaloids of ergot (prepared by hydro-alcoholic extraction), and synergized by the presence of apiol, oil of savin and aloin—Ergoapiol provides a balanced and sustained tonic action on the uterus, affording welcome relief in many functional catamenial disturbances. It produces a desirable hyperemia of the pelvic organs, and stimulates smooth, rhythmic uterine contractions. Ergoapiol also serves as an efficient hemostatic and oxytocic agent. Dosage: 1 to 2 capsules 3 to 4 times daily.

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TRUSHAY protected hands are soft and supple. They will appeal to fastidious patients.

More and more professional men and women are recognizing the advantages of this sensible corrective for the drying effects of frequent scrubbings. TRUSHAY does not interfere with the hygienic cleanliness produced by soap and water because it is used BEFOREHAND.

TRUSHAY contains no glycerin, is not sticky or gummy. It guards against excessive depletion of the skin's natural lubricant . . . aids in keeping the epidermis pliant and unbroken.

Your patients will appreciate TRUSHAY for their personal use, too. Recommend it with confidence and the assurance of their appreciation.

TRUSHAY

THE "BEFOREHAND" LOTION

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Critique

Fossil pyorrhea It is rather discouraging to contemplate that pyorrhea has such a long, if not distinguished, history. It has attacked the teeth of man from the dawn of the race; undoubted traces of the disease occur among the most ancient human relics. No primitive race was exempt, whether early Hawaiians, Peruvians, or North American Indians. They also suffered loss of efficiency and at times total loss of teeth. Even fossil animals didn't escape. Paleontologists have uncovered accepted evidence that there was pyorrhea among the mastodons of the Ice Age—the Cohoes mastodon in the New York State Museum at Albany, for instance. There is also undoubted evidence of the disease in the wolves and tigers of the California tar pits which are preserved in the Los Angeles museum.

The country doctor must know how to Change tires quickly at 4 below and 4 a. m.; set a fractured femur with a piece of string and a flatiron and get as good a result as the mechanical engineering staff at the city hospital, at ten percent of their fee; drive through ten miles of mud to minister to the child of a drunkard; do a podalic reversion on the kitchen table of a farmhouse, with the husband holding the legs and grandma giving the anesthetic and the advice; diagnose tonsillitis from diphtheria with a laboratory forty-eight miles away; pull the three-pronged fish-hook molar of a two hundred and fifty pound hired man, aided only by "moonshine" and faith in God; and maintain his equilibrium when the lordly specialist sneeringly refers to him as a mere general practitioner.

World food Sir Daniel Hall told the agricultural section of the British Association for the Advancement of Science in 1926, that white people require 2 to 2.5 acres of arable land per capita to supply their food and agricultural raw materials, and that the world's arable land was running out. He advised intensive culture, particularly in the United States for fear population growth might outstrip accelerated farm production. Instead, farm science has improved crops and methods by leaps and bounds to the point where, during the war, we produced enough food for fifty million additional people, with labor down to eighty-five percent of the prewar level, equipment and materials short, and no appreciable increase in acreage. With certain rather minor changes in patterns of farm production and diet, we could readily produce enough to supply an adequate diet to twice as many people as are now in the United States. The problem has become one of sabotaging agricultural science, practically applied, to prevent pauperizing a large percentage of our rural population!

Smoking Smoking twenty to twenty-five cigarettes a day, decreases the milk secretion of a mother, said Dr. Robert A. Hatcher and Hilda Crosby of Cornell University Medical College—*American Journal of Pharmacy*, June 1929. Nicotine in small amounts was found in the milk. Nicotine acted to suppress milk secretion in cats and cows also.

I. Q. In his *Immigrant Farmers and Their Children*, Edmund deS Brunner, concluded that, whatever the I. Q. is and wherever intelligence testing actually does test, children of the foreign born do run as high as native born. They will neither depress nor raise the intelligence of the communities into which they are absorbed. He thought the previous tests tested too few or were imperfectly carried out and that the army tests of World War I were imperfect for ascertaining this point.

Nutrition in prosperity These days when we hear so much about world famine and malnutrition, it is nice to look back to the 1920's when prosperity ruled and obviously everyone was, or should have been, well-fed. Well before the stock-market crash, Dr. Victor E. Levine of the school of medicine at Creighton University, discussed the importance of nutrition in child hygiene in the June, 1929 issue of *Scientific Monthly*. He cited a report, issued in 1918 by the Children's Bureau, which was shocking because of its figures on physically and mentally defective school children; and remarked that in 1929, one-third of the Chicago school children had some nervous disorder, while two-thirds of the New York school children were physically defective. A large percentage of growing children were underweight for their age, and in many instances, sixty percent of the children examined were undernourished. In a study of 506 children, selected as the best specimens of health that could be found in the schools, one-fifth were discovered to be underweight, from ten to thirteen percent, depending on the weight standards selected. Undernourishment and malnutrition were found to be prevalent among children of the well-to-do, as well as of the poor. Even during prosperity, over a billion dollars a year was being spent by the nation in an effort to educate underfed, undernourished and physically defective children. Only twelve to fifteen million dollars was being spent annually for school health work. No wonder, said Dr. Levine, that fifteen to twenty percent of nonpromotion and retardation in studies was traceable to ill-health, poor nutrition and remediable effects. We had prosperity, but not enough to feed the children and look after their health. This reminds us, that findings which were recently presented, showed that persons who are receiving relief in New York City cannot be as well fed as those in the liberated cities of Europe.

The Critic

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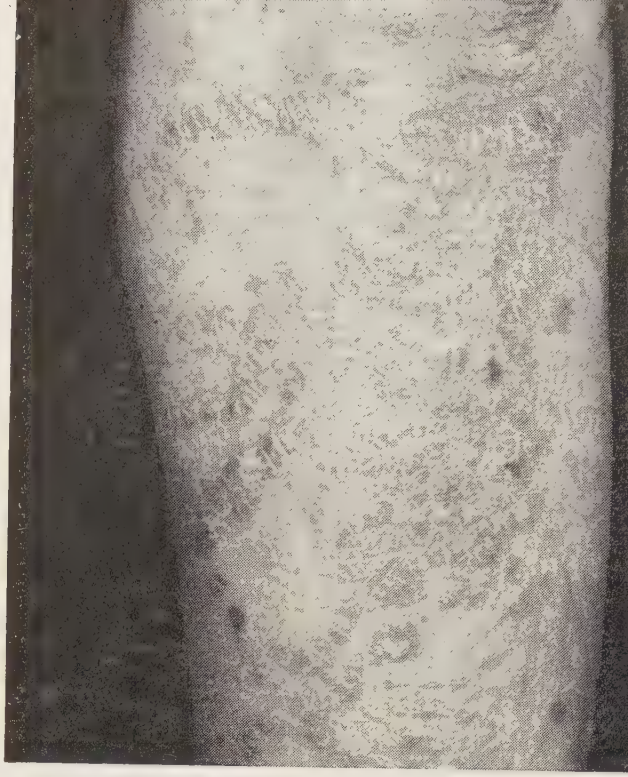

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New Surgical Powder

At the annual convention of the American Medical Association a new powder for surgeon's gloves, which promises to reduce many re-operations, due to adhesions, now considered unavoidable, was introduced. It will replace talcum powder which when carried into an open wound, particularly the abdominal cavity, acts as a foreign body. Talc often causes adhesions, from a few days to as much as thirty years after an operation. In one case, reported by Dr. M. G. Seelig of the Barnard Free Skin and Cancer Hospital, St. Louis, it resulted in seven re-operations after an appendectomy.

Because the human system cannot absorb talcum, in some persons there is an immediate internal inflammation. In others, adhesions may not appear until months later externally on the scar. In some patients, no detectable damage ever appears.

The powder, made from a chemically processed corn starch, was developed by the Johnson & Johnson research laboratories at New Brunswick, N. J., in cooperation with medical men working independently at various universities and clinics.

Talcum at present is almost universally used in surgery. It permits a doctor to draw on his sterilized rubber gloves necessary in operating. It is dusted inside and outside the gloves, and on the doctor's hands. Frequently it is found in the air of an operating room in fairly large amounts.

Washing the gloves in alcohol or sterile water does not remove all the talc particles. Further, nearly one out of four pairs of surgeon's gloves are punctured during an operation. Even though the puncture is invisible to the naked eye, talc particles may escape from inside the gloves.

For ten years medical researchers, among whom were Drs. A. L. Lichtman, John R. McDonald, Claude F. Dixon and Frank C. Mann, all of the Mayo Clinic at Rochester, Minn., have had talc under suspicion and studied its effects. But it was not until recently with the use of polarized microscopy that troublesome post-operative adhesions were traced directly to talc.

Medical men found that talc caused post-operative intestinal obstructions and many difficult-to-cure granulomas on the skin after an operating incision. Talc adhesions also were discovered in draining sinuses, neck operations and in rectal tissue, where talcum had been introduced by suppositories or during the treatment for hemorrhoids.

Tests using the newly developed powder have shown not one adhesion resulting. There was also no trace of the powder itself. Dr. Marshall Lee, Jr., of the University of North Carolina College of Medicine and Dr. Edwin P. Lehman of the University of Virginia School of Medicine concluded in a report published recently that the "brief clinical trial of this powder has been entirely satisfactory."

It is believed that the new non-irritating powder will markedly reduce this number.

Dietary Factors in Tooth Decay

Observing that a group of Filipino children in poor general health had much better teeth than a group of local children in Hawaii in excellent health, Dr. Nils P. Larsen, Honolulu, told the Section on General Medical Practice at the American Medical Association meeting that dietary factors are probably the determining element in freedom from tooth decay.

Dr. Larsen's paper entitled "Tooth Decay in Relation to Diet and General Health," was based on extensive studies made of over a thousand children living on sugar plantations in Hawaii and one hundred children who had recently arrived from the war-torn Philippines. Examinations were made by the dental research committee of the Honolulu Dental Association, Dr. Larsen said.

Although tooth decay in general is higher among children on a diet with a high carbohydrate content — that is, one of starches and sweets — Dr. Larsen emphasized that this is not always the case; that some children on such diets have very good teeth.

"The reported observations in Hawaii suggest that other factors than the acid base balance or vitamin A may account for the striking difference in decay in the various groups of children observed," he said "Heredity does not seem to play an important role in this condition. Hawaiians on the Polynesian diet for eight hundred years had excellent teeth, while first generation Hawaiians on the Oriental diet of rice had poor teeth. Filipino children in the Philippines had little tooth decay, while Filipino children in Hawaii had much."

Indications are, Dr. Larsen said, that it is not sugar or vitamin intake of themselves which determine tooth decay or lack of it, but rather whether certain protective substances, such as fluorine or oxalate, are added to the diet.

"The Hawaiians on their ancient diets consumed much seafood which is high in fluorine," Dr. Larsen said. "They probably also swallowed more ocean water, which is high in fluorine. They also ate much Taro and poi which is high in oxalate — a possible tooth decay preventative, as might be vitamin K which is present in raw sugar cane.

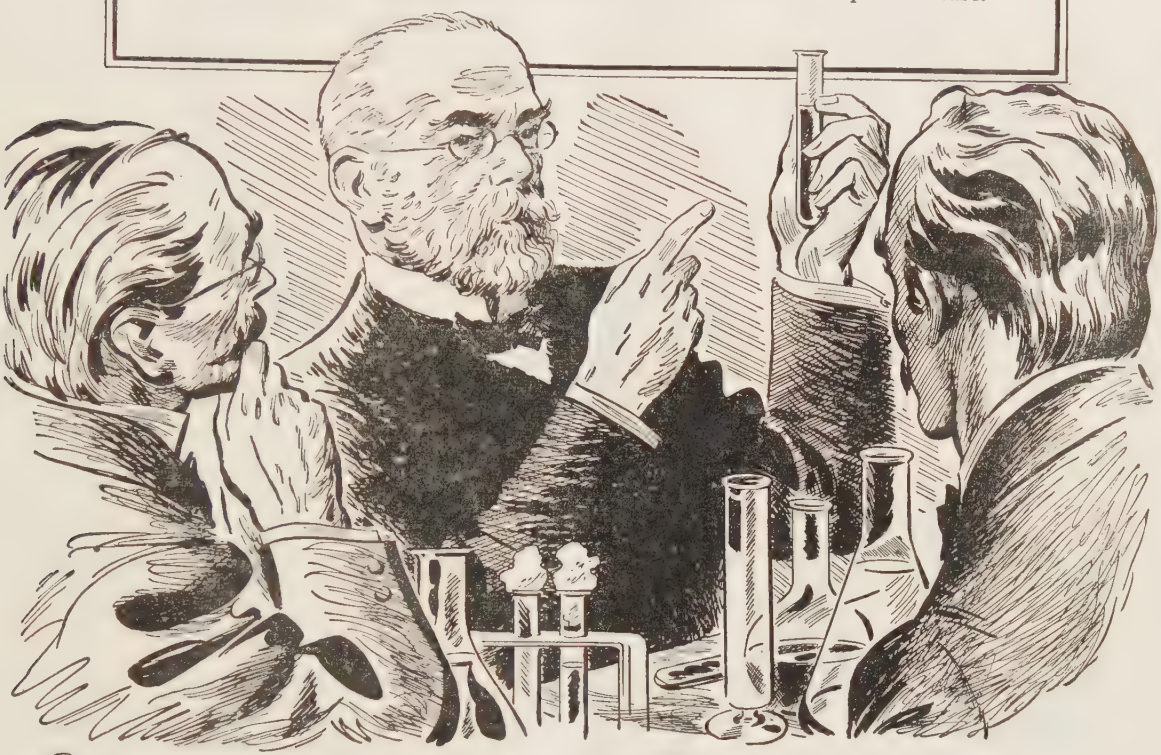
"Perhaps the excellent Eskimo teeth also came from the high fluorine content of their seafood," Dr Larsen added, pointing out that coast natives of New Guinea eating more fish have less tooth decay than inland natives, who have less seafood in their diet.

Despite this, he said, some peoples with a high fluorine intake have more tooth decay than other peoples with a similar fluorine intake. The possibilities are strong, he indicated, that peoples with the best teeth are those whose diet consists of a combination of foods whose chemical make-up prevents the over activity of acid-forming bacteria. Such diet contains not only fluorine and oxalate, but foods with a high alkaline residue.

Experience is the Best Teacher

Robert Koch (*1843-1910*) **proved it in bacteriology...**

Koch showed in his postulates that he knew the value of experience: Specificity is demonstrated only when the microorganism (1) is present in all cases of the disease, (2) can be cultivated in pure culture, (3) produces the disease in susceptibles on inoculation, and (4) can be recultivated in pure culture.



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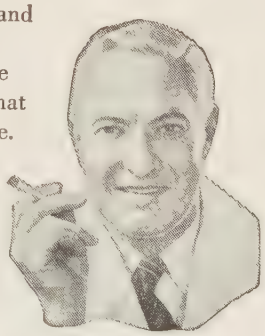

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ETHYLENE DISULPHONATE IN ALLERGY

A Six-Year Investigation: 1800 *Cases*

CLIFFORD L. BARTLETT, M. D.
Pasadena, Calif.

In two previous papers (1, 2) published in 1944, the author reported the results following the use of ethylene disulphonate in the treatment of 247 allergic children, and 528 allergic adults, with various allergic manifestations. In previous publications by the writer and others (3, 4, 5, 6, 7, 8, 9, 10) there has been ample discussion of the history, theory and method of treatment. Hence, no special reference to those aspects of the subject will be made here. The subsequent history of the approximately 800 cases referred to in the two previous reports mentioned above has been periodically rechecked. In the three years since those two papers were prepared, a thousand further cases have been treated. In this paper it is proposed to summarize the results observed over the six-year period involved in this study in the total of 1800 cases.

The total dosage of ethylene disulphonate which is going to be needed by a given patient, child or adult, cannot be predetermined. However, most of the cases fall within a fairly well defined routine of dosage, which varies according to the nature of the allergic manifestation; the age and general health of the patient; and the actual condition of the patient at the time when treatment begins. After the preliminary course of treatment, the degree of the clinical response elicited is the criterion which determines the need for subsequent therapy. Generally speaking, treatment in children has commenced with one single 2 cc. injection of ethylene disulphonate, while in adults the preliminary course of treatment has been either one or three injections. It is unnecessary to go into further details here as to the routine of subsequent treatment, since this subject has been fully covered by the author's earlier work.

The clinical results obtained in the 1800 cases treated are outlined in the following three charts. They include 1066 adult cases divided as follows: asthma, 725; hay fever and allergic rhinitis, 192; eczema, 62; urticaria, 14; migraine, 73. There are 734 cases in children under 12, divided as follows: asthma, 412; hay fever and allergic rhinitis, 220; eczema, 86; urticaria, 16. It will be observed that the statistics are substantially the same as those recorded earlier, *i. e.*, 990, or 55 percent completely relieved, 546, or 30.44 percent practically relieved and 264, or 14.66 percent no relief. It should be borne in mind that a very large majority of these cases are patients who had previously experienced almost every known form of therapy, without any definite response. It was, therefore, considered unnecessary to run an equivalent number of controls, inasmuch as the previous treatment undergone provided adequate control. It is also important to record that no untoward reactions of any sort were noted and in no case was there any evidence of toxicity. The average number of 2 cc. injections of ethylene disulphonate used in the 1066 adult cases was 4.3 per case; in the 734 juvenile cases, the average was 1.56 per case.

Constant observation of patients treated, ever since this study was begun some six years ago has shown that of the patients who became symptom-free, 14 percent have subsequently developed further symptoms. In such cases, a symptom-free condition usually was re-established after further treatment, in a shorter space of time than was required to produce a complete clinical response originally.

Of this adult group originally reported as being symptom-free, 42 had some recurrence a year or more following treatment and have been classified here with the practically completely relieved.

Average number of injections was 4.3.

Of the total group 24 percent had more than one manifestation of allergy and of that group 35 percent fell into the classification of practically relieved, having some residue of one type of allergy.

Of the original 247 cases of children reported under twelve years of age, 21 had some recurrence a year or more following treatment and have been classified with the practically relieved. Average number of injections was 1.56.

Of the total group, 16 percent had more than

ADULT GROUP 1066 CASES

Type of Allergy	Total No. of Cases	Percent of Total Number	Result of Treatment	No. of Cases	Percent	Percent of Clinical Results
Asthma	725	68	Completely relieved	391	54	Satisfactory results
			Practically relieved	225	31	616 or 85 percent
			No relief	109	15	
Hay fever (seasonal) Allergic rhinitis (Non-seasonal)	192	18	Completely relieved	88	46	Satisfactory results
			Practically relieved	55	29	143 or 75 percent
			No relief	49	25	
Eczema	62	6	Completely relieved	40	65	Satisfactory results
			Practically relieved	13	21	53 or 86 percent
			No relief	9	14	
Urticaria and Angio-neurotic Edema	14	1	Completely relieved	8	57	Satisfactory results
			Practically relieved	3	21.5	11 or 79 percent
			No relief	3	21.5	
Migraine	73	7	Completely relieved	55	75.4	Satisfactory results
			Practically relieved	12	16.4	67 or 92 precent
			No relief	6	8.2	

CHILDREN UNDER 12, 734 CASES

Type of Allergy	Total No. of Cases	Percent of Total Number	Result of Treatment	No. of Cases	Percent	Percent of Clinical Results
Asthma	412	56	Completely relieved	239	58	Satisfactory results
			Practically relieved	132	32	371 or 90 percent
			No relief	41	10	
Hay fever (Seasonal) Allergic rhinitis (Nonseasonal)	220	30	Completely relieved	105	48	Satisfactory results
			Practically relieved	80	36	185 or 84 percent
			No relief	35	16	
Eczema	86	12	Completely relieved	56	65	Satisfactory results
			Practically relieved	21	24	77 or 89 percent
			No relief	9	11	
Urticaria	16	2	Completely relieved	8	50	Satisfactory results
			Practically relieved	5	31	13 or 81 percent
			No relief	3	19	

ADULTS AND CHILDREN COMBINED 1800 CASES, 6 YEARS

Type of Allergy	Total No. of Cases	Percent of Total Number	Result of Treatment	No. of Cases	Percent	Percent of Clinical Results
Asthma	1137	63	Completely relieved	630	55.5	Satisfactory results
			Practically relieved	357	31.5	987 or 86 percent
			No relief	150	13	
Hay fever (Seasonal) Allergic rhinitis (Nonseasonal)	412	23	Completely relieved	193	47	Satisfactory results
			Practically relieved	135	33	328 or 80 percent
			No relief	84	20	
Eczema	148	8	Completely relieved	96	65	Satisfactory results
			Practically relieved	34	23	130 or 88 percent
			No relief	18	12	
Urticaria and Angioneurotic Edemic	30	2	Completely relieved	16	53	Satisfactory results
			Practically relieved	8	27	24 or 80 percent
			No relief	6	20	
Migraine	73	4	Completely relieved	55	75.4	Satisfactory results
			Practically relieved	12	16.4	67 or 91 percent
			No relief	6	8.2	

one manifestation of allergy, and of these, 21 percent fell into the practically relieved classification having some small residue of one type of allergy.

In view of the very high percentage of satisfactory results reported in the 1800 cases under review, a further discussion of some of the cases in which incomplete results were obtained, or in which failure occured, may be apropos. In the group of 734 children, 88 are reported as failures. The majority of these children, as well as of those in which only partial results were obtained, were patients having more than one allergic manifestation, in whom one, or more, allergic manifestation disappeared, with a residue of one remaining. This was especially noticeable in children having asthma and a rather marked degree of eczema, in which there remained a residue of eczema. The same observation holds for the combination of asthma and allergic rhinitis, in which some residue of rhinitis remained. In some of these cases, subsequent treatment disposed of the residue and the children have since remained free from either difficulty. Some of these partial responses arose from the fact that so high a percentage of the allergic children responded to one single injection of ethylene disulphonate that there was perhaps too great a reluctance to give further treatment at a sufficiently early date. Sometimes parents were sufficiently satisfied with the amelioration produced following the single injection and decided against further treatment, with the idea that the residue would subsequently clear up. The tendency has probably been toward underdosage and there is little doubt that the statistics might be further improved by adopting a somewhat more generous dosage policy, particularly in the treatment of children with more than one allergic manifestation. This is being undertaken at the present time and although it is too early to report on these cases, observation to date seems to bear out the fact that a more generous dosage is indicated.

In the group of 1066 adults, 176 are reported as failures. In this group the younger patients responded just as well as did the children. The majority of these cases were given an initial series of three injections. The majority of the incomplete results and the failures occur in the older age group. In many of these cases, there existed definite chronic pathological changes, which, to all intents and purposes, were irreversible. In the majority of cases, these conditions were cardiovascular, emphysema, bronchiectasis and arteriosclerotic changes. Whether these changes are entirely the result of the continued allergic bombardment, or whether they are due to other causes, or, which is more likely, whether they are concurrent developments, each having a bearing on the other, the fact remains that they are present and are a definite part of the clinical picture. There have been numerous elderly patients in this group, who manifested in varying degrees, cardiac decompensation, with passive congestion and dyspnea. They had also a typical history of asthma, including the cardiac condition. Following treatment they obtained more or less relief. In all of these cases, connective tissue changes involving the vascular system, the lungs and the bronchial system can be demonstrated. An attempt is made to relieve the vascular problem during treatment, but in many of these cases, some respiratory difficulty remains. It is not always easy to tell where the asthma leaves off and the cardiac dyspnea begins.

In cases with purulent bronchiectasis, attempts have been made to modify this condition as much as possible and to determine whether the patients were allergic to their own bacteria. This latter condition is still somewhat debatable, although three of the author's cases apparently indicated the fact. These three cases were not at first entirely relieved by ethylene disulphonate, but were relieved when their bronchial infection was modified.

Epstein (11), in his recent paper on *Allergic skin diseases* refers to the frequency with which infections complicate the picture in children, as follows: "Bivings (12) reports a series of twenty-two cases of acute infections. The characteristic picture was an urticarial eruption of varying intensity, usually edema of the hands and feet, and fever. In nineteen cases acute throat infection was the focus, in two cases acute otitis media, and in one pyelitis. Six throat cultures did not show the same organisms in any two cultures."

Bacteriological studies of the purulent sputum in the author's group revealed those organisms common to the human respiratory tract in all cases but one, and this one showed a dominant flora of monilia.

The use of penicillin (in wax and oil, aqueous injection and by inhalation) helped only in so far as the organisms present were susceptible to penicillin, in which cases the reduction of the chronic infection was an advantage. Abramson remarked in his paper on aerosol therapy (13): "Most gram-positive organisms were consistently absent from the sputum during penicillin aerosol therapy." Certainly penicillin cannot be considered as a treatment for asthma, but simply as a useful adjuvant to be used in cases where there is an infection involving organisms of the type against which penicillin is active.

In a lesser number of cases, certain other factors were incriminated as the cause of failure. In nine cases it was found that the patients were narcotic addicts. A larger number were found to be chronic or intermittent alcoholics.

Failures in other cases are attributed to error in the original diagnosis. For example: two cases, one a physician and one the sister of a physician, came for treatment. In both cases, the previously made diagnosis of "bronchial asthma" was accepted and treatment was given, but without results. In both cases the correct diagnosis

was made later by another physician and successful treatment instituted. Both of these cases were substernal thyroids and responded to surgery, with a cessation of their "asthma". Two children were accepted and treated, after the ordinary history and examination, but without a fluoroscopic or x ray examination of the chest. Both failed to respond and were later shown to have small foreign bodies in the bronchi, one a small button and the other a small piece of metal foil, both removed by bronchoscopy, followed by a complete recovery. One of these cases had been under treatment elsewhere with injections of penicillin for almost a year previously. The relative frequency with which cases of this kind can occur has been referred to by Glaser (14): "Some of the most tragic mistakes in the differential diagnosis of bronchial asthma are made because the physician does not realize that the symptoms and physical signs of asthma may be produced to an exceedingly misleading extent by the presence of a foreign body in a bronchus. This is especially true in infancy and childhood because these patients appear at times to exercise almost diabolical ingenuity in getting unsuspected foreign bodies into their bronchial trees."

Especially in the middle-age groups, the presence of chronic fibrous tuberculosis must always be ruled out. Chronic, nonspecific mediastinitis, with adenopathy, is often a pitfall. Referring again to Glaser's paper, he observed: "The internist who is also an allergist must particularly consider allergy in its relationship to the degenerative and neoplastic diseases of adult life."

It has been suggested on occasion that the results obtained from the use of ethylene disulphonate are entirely psychological. When considering such a criticism, it should be borne in mind that, as already stated, a large proportion of the cases treated had previously been the subject of many other forms of therapy. If the results obtained were due to psychological effect, a physician could expect the same results from any treatment in which hypodermic medication was employed, regardless of the material used. The particular content of the syringe would make no difference. Statistical reports of treatment with presumably specific allergens certainly do not compare with reports following the use of ethylene disulphonate. Moreover, one would hardly expect a clinical response in cases of infants in arms if the effect were dependent upon the emotional attitude of the patient and the mesmerizing effect of the physician. As Glaser remarks (14): "The absence of anxiety on the part of the infantile patient in a severe attack of asthma is in striking contrast to that of the adult. An infant may be wheezing loudly and apparently have great difficulty in breathing, and yet his attention may be distracted and he may even be made to smile by dangling a rattle or other toy in front of his eyes."

It is a commonly accepted fact that emotional strains and crises are factors to be considered in the analysis and treatment of many patients with allergic manifestations. They apparently act in these instances as a trigger mechanism. However, their occurrence and modification do not play any greater part in the successful care of the allergic patient than in the care and treatment of other manifestations of deviation from the normal, seen daily by the physician. It is axiomatic that it is necessary to know and understand the entire patient before real success can be obtained in any treatment. Epstein refers to one aspect of the subject in the following terms (15): "Clarence Bernstein (16) underlines the relationship between allergy and nervous fatigue. Illustrated by six case histories, the interplay of allergy and personality is demonstrated. The patients with 'eczema' should be studied both for allergic exposures and situational, personality and environmental influence. Treatment should take both into consideration. Correction of the psychological factors hastens recovery. The author recommends sedatives, especially phenobarbital, mid-day naps, and suntanning for the patient. He found injections of 2 cc. crude liver extract twice weekly, helpful. If itching persisted, or there was oozing he gave 10 cc. of 10 percent calcium gluconate intravenously two or four times weekly. No major psychotherapy was undertaken since it was felt that this is the province of the specialist in that field. Much sympathetic counsel, however, is thought necessary."

As Dundy, Zohn and Chobot observed in their paper, *Histamine Azoprotein· Clinical evaluation* (17): "The possibility of spontaneous remission, or the psychic effect of a new therapeutic measure as an etiological factor in improvement, cannot be excluded." No objective observer, however, will contend that such "psychic effect" could play any part in more than a very small proportion of a group of 1800 patients.

At the end of a summary of their paper on *Histamine azoprotein in the treatment of allergy* (18), Cohen and Friedman make the following observation: "The results obtained in chronic urticaria were most gratifying. In the days before this drug was available, we felt relatively helpless when confronted by a case of chronic urticaria which could not be proved to be due to the ingestion of some drug. Today we expect to obtain a satisfactory result in the majority, using the drug as an adjunct to general medical and psychological therapy. In asthma, we also obtained gratifying results. The cases chosen for this treatment were classed as failures following ordinary management. *Any method which gives relief to half of such cases is worthy of continued use.*" (Author's italics.)

It is felt that the results here recorded in a group of this size, with the wide age range as previously reported, warrant continued investigation and further research.

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ETHYLENE DISULPHONATE AND THE ALLERGIC STATE

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Today the treatment of allergic disorders is in a state of flux, with a general and disorderly shift from specific to non-specific treatment for this bedeviling, frightening, dramatic, and yet relatively benign disease-complex, which ranges all the way from an agonizing inability to breathe, to a few morning sneezes in August, or hives after strawberries. If only the major diseases—cancer and tuberculosis and the rheumatic heart—in their incipient state would proclaim their presence with the alarums of allergy! The victims of allergy parade their dependence on various external aids: paper handkerchiefs, atomizers, syringes, and pills. They bedeck their conversation with the names of a succession of past and present specialists, giving the impression that they are no ordinary mortals. By contrast, the victim of cancer or tuberculosis or rheumatic fever is apt to learn of his condition suddenly and quietly, with a shock, after he has long harbored it.

The allergic child is the family tyrant. "He wants what he wants when he wants it." Every member of the family is a nervous wreck, but least of all the allergic victim himself. It is often surprising how calmly an allergic child accepts his handicap and resents the mother's minute account of his endless symptoms. "I'm fine, Doctor," says the boy. "Oh! Doctor, don't believe him," interrupts the mother; "I am up with him every night. Look at me: I'm a nervous wreck!" So the allergic child grows up in an atmosphere of over-indulgence, over-protection, over-solicitude, and pessimism.

If the allergy lasts long enough, the child comes to learn that it pays to have a bout of sneezing or wheezing when he wants something badly. He gets anything, from permission to sleep with mother to a stay in Arizona, and by that time "allergy" has become a deep-rooted conditioned reflex. Most children in the beginning work hard to fight off their families and doctors, but when the fight is too much for them, they become chronic invalids.

The mothers are often the problem. While they consciously wish their children to be well, they unconsciously often enjoy the role of *Mater Dolorosa*, holding on their lap a fragile, wheezing, dependent child, and neglecting the rest of the family and the world. When the child gets well, there is often a new complaint, ranging from the simplicity of the Italian mother who says in the clinic: "When Salvatore sick, he good boy, sit at home and read comics. Now you get him well and he bad boy, run in street and stick his tongue at me when I holler"; to the revealing admission of a sophisticated and well-to-do mother who said only recently, "I don't know what to do with my time now that Eric is well. He insists on my leaving him alone."

It is the author's conviction that elaborate medication aggravates the allergic condition in children and adults by its psychological effects on the victim and his family. Simple medication helps, and in early cases can bring about lasting recovery; but in long-standing cases medication must be supplemented by the re-education of patient and family.

Ethylene Disulphonate

I first learned of the existence of ethylene disulphonate in December 1938, when I received a visit from an English physician favorably known to me by his London reputation, Dr. John Bodman. He told me of the laboratory and clinical work that he and certain associates had done with this preparation, and urged me to try it out. Sceptical, I began with three private patients, whose startling improvement led me to try it on a few more patients. I imported the chemical from England until it began to be available in the United States in 1941. The results were so good from the start that, though still sceptical, I finally felt impelled, in October 1941, to try out the preparation with allergic children in a clinic that I organized for this purpose.* Little by little, as my scepticism turned into confidence, I continued to use E. D. (as I shall usually refer to it hereafter) in my private and clinic practice.

In 1943 I published my results of the treatment with E. D. of a small but intensively worked-up, closely controlled group of clinic children. The results justified a more extensive trial: In this paper I shall report on my experience with 177 patients, some of whom have been under observation for almost eight years and none of whom have been under observation for less than three months. These patients include all to whom E. D. was administered in the period dealt with, except seven who failed to report back after the treatment.

For the sake of clarity, I shall divide my patients into three groups, and each group into two subgroups:

1. Children in the allergy clinic at City Hospital, N. Y. C.
   a. A follow-up on the initial 20 patients dealt with in my previous article.
   b. New clinic patients since September 1943.
2. Private patients, children.
   a. Patients who received their first injection between January 1939 and June 1945.
   b. Patients who received initial injection in the period from September 1945 to April 1946 inclusive. We segregate these cases because of the short period of observation.
3. Private patients, adults.
   a. Same as 2a.
   b. Same as 2b.

Group I — Clinic Patients

My clinic patients at the City Hospital Dispensary are in some respects the most interesting. They are usually very young, and are referred to me from the general pediatric clinic; most of them are colored. They know little about allergy or the treatment for it. Neither mother nor child is yet entangled in the devastating psychological involvements that afflict old-standing patients and their families of higher economic status, who have been put through the orthodox allergy mill by specialists. To the clinic mothers, the wheezes and coughs and rashes of their children are just another nuisance and E. D. is just another "shot". The attendance in the clinic is small, averaging half a dozen patients at each session. Unlike mothers of private patients, these are cool, inarticulate, and resigned. The contact with them is so tenuous that the psychological factor in the treatment can be disregarded.

*The work was carried out at the Children's Allergy Clinic, City Hospital Dispensary, New York City. The ampoules of Ethylene Disulphonate were supplied by Spicer-Gerhart Company, Pasadena 1, California.

Instructions for Patients to be Treated with Ethylene Disulphonate

To be observed strictly for one week before the injection and for two weeks thereafter. If there is a series of injections, these instructions are to be observed for a week before the first injection, during the series, and for two weeks after the last injection.

Diet

I. (a) No meat, fish, or fowl.
   (b) One small serving of meat (other than pork) white fish, or poultry once a day. *It must not be fried.*

II. No fried food of any kind, such as fried potatoes or doughnuts.

III. No fats, except butter, cream, and sourcream.

IV. (a) No free cane sugar, honey, syrups, ice cream, candy, sweet drinks, jams, or jellies.
   (b) Reduce all your sugar consumption by one-half.

V. Eat plenty of all other foods. A vegetarian cook book is useful.

VI. Extra vitamin intake—

Medication

VII. (a) All medicine is completely forbidden.
   (b) Forbidden: aspirin and other coal tar derivatives, opiates, barbiturates, sulfonamides.

VIII. No tobacco or alcohol.

IX. The following medication is allowed in moderation: ephedrine nose drops, adrenalin spray, injections of adrenalin, aminophyllin, Sedormid, bromides, mustard plaster and baths. Reduce the intake of coffee and tea.

X. On two consecutive nights before each injection take a cathartic—

FIG. 1

In September 1943 I discontinued routine skin testing as a meaningless addition to the child's sufferings. E. D. presents a non-specific approach to allergy, and it is irrelevant whether the child reacts to one or thirty allergens; or whether (as sometimes happens) the child reacts to no skin tests yet continues to have asthma. Apart from giving up the skin tests our routine of investigation remained the same as reported in the previous article: complete physical examination, detailed history, x ray of chest, tuberculin test, complete blood count, and sedimentation rate. To each parent we gave a simple sheet of instructions (Fig. 1) for preparing the child to take the injection. We do not know how faithfully these instructions were carried out. In the instructions, under I, IV, and VII, we strike out either paragraph (a) or (b), according to the patient's dietary habits and the parent's intelligence. Under "cathartic" we write in milk of magnesia for infants and citrate of magnesia for older children. The standard dose of E. D. is 2 cc. injected into the deltoid. The injection is painful for about two minutes and is accompanied by visible fibrillation. In my experience there has never been any unfavorable reaction.

In order to save space, I shall assume here that the interested reader will refer to the previous article (1) for details of the method used in administering E. D. and the results there reported.

In Table 1, 1a these results are brought up through June 1946. Briefly, of the 20 patients, we were unable to re-establish contact with five, who had drifted away and could not be traced; among those five was one of the two failures reported in the previous paper. Of the remaining 15, twelve were found to be symptom-free. The other three needed one more injection of E.D. after a lapse of an average period of 25 months, and then remained symptom-free. The average total period of observation for these fifteen children was 47.7 months.

Group 1b. Since June 1943, 36 additional clinic children were treated with E. D. Of these, three have not been seen since the first injection and are entirely excluded from our computations. (These are three of the seven mentioned in the beginning as missing.) With the remaining 33 children we kept no controls because of the wartime shortage of social workers and hospital personnel, whose task it is to run down and bring back to the clinic neglectful mothers and children. It was necessary to concentrate the reduced facilities on the treated patients. At least as many untreated children are registered in the clinic and could have served as controls, had it been possible to exact from their parents better attendance.

The record of the children in Group 1b has been almost as good as in 1a. After one injection, 15 children became and remained for the period of observation symptom-free, a period that averaged 13 months. As the table shows, two-thirds of the children showed very good results.

Private Patients

My private allergy patients presented a different problem. Their story begins three years before the organization of the allergy clinic at City Hospital. Those early cases, between 1939 and 1941 inclusive, numbered however only a score, so sceptical was I then of E. D. My rule was to promise the patients nothing and to charge nothing.

In a vital respect most private allergy patients differ from the children in the allergy clinic. In a municipal clinic the children and their mothers, as we have said, are usually still innocent of the psychological complications that beset allergy experience in private practice.

Instead, with most of my private allergy patients (including mothers in that class), health is an obsession. They usually think they know everything about themselves (or their sick children) and insist on telling more than they do know. They have often worn paths to the doors of many specialists and laboratories. Some of them have at times taken refuge in cults, especially Christian Science. They have sought relief from chiropractors, from "iridiopaths", and from "naturopaths". Though always disappointed, they never lose hope of a "cure"; at least they express that hope fervently, though unconsciously they may cling to their infirmity. (When I see a new patient who meets me with the words, "Doctor, you are my last hope," my own hopes fall.) They come to me demanding that I give them a "shot" of E. D. out of hand, and are disappointed when they are made to wait a week. Taking their history is a tedious business: they tell you everything on the conscious level. Some send in their

TABLE 1

RESULTS OF ETHYLENE DISULPHONATE THERAPY IN PEDIATRIC ALLERGY CLINIC, CITY HOSPITAL 1941-1946

	Group a		Group b
	Treated Initially Sept. 1941-June 1943	Same Patients Followed up to June 1946	New Patients Treated Sept. 1943-June 1946
No. of Patients	20	15*	33
Race: Negro	15	12	20
White	5	3	13
Sex: Male	10	9	21
Female	10	6	12
Average Age	6 (in June 1943)	9 (in June 1946)	7 (in June 1946)
Diagnosis:			
Asthma	5	5	21
Eczema	1	0	5
Hay fever	1	1	1
Urticaria	1	1	2
Angioneurotic edema	-	-	2
Multiple allergy	12	8	2
Average duration of symptoms prior to injection of E.D.	25 mos.	26 mos.	28 mos.
Average duration of observation since first injections of E.D.	11.3 mos.	47.7 mos.	12 mos.
Average no. of injections of E.D.	1.5	2	2.1
Clinical Results			
Very good	11 (55%)	12 (80%)	22 (67%)
Good	6 (30%)	3 (20%)	4 (12%)
Fair	1 (5%)	-	2 (6%)
Poor	2 (10%)	-	5 (15%)

*Five patients had drifted away.

anamnesis beforehand, others carry it like identification papers in their pocket. These case histories composed by the patients themselves are often minutely detailed, filled with medical terms sometimes correctly used, and shot through with the morbid intelligence of the hypochondriac. They complain that they have been cheated by the medical world and by the whole world. They are filled with self-pity. In the case of parents, they reveal a feeling of guilt that in some way they have denied their offspring normal health. However, by their own exaggerated solicitude they persist in aggravating the damage they have done.

Group 2 — Private Patients, Children

The usual thing for these patients before coming to me is to have had a tonsillectomy, innumerable nasal packs, two or even more contradictory sets of skin tests, and a long record—sometimes many years—of injections of a miscellany of extracts and histamine. The child is rarely as sick as his mother thinks, but his initial attitude toward a new doctor is usually sullen, silent, and suspicious. However, once he is put on a more liberal diet and is told he can roller-skate if this does not make it hard for him to breathe, he becomes friendly. The usual thing is for the mother, at the end of the first talk, to ask the old, old question: "Are you sure, Doctor, that this is going to cure, Johnny?" To this my answer always is, "No, but it is likely to help him; and *if* you relax and allow him a normal diet and normal outlets for his energies, then it may get him really well." The child leaves delighted, and the mother, though incredulous, is sometimes willing to try a little discipline on Johnny, and *also* on herself.

TABLE 2

RESULTS OF ETHYLENE DISULPHONATE THERAPY IN PRIVATE PATIENTS, CHILDREN, TREATED BETWEEN 1939-46

	Group a	Group b
	Treated initially Jan. 1939-June 1945	New Patients Treated Sept. 1945-June 1946
No. of Patients	29	31
Sex: Boys	19	19
Girls	10	12
Average Age	10 yrs. (in June 1946)	7.4 (in June 1946)
Diagnosis		
Asthma	15	14
Eczema	4	1
Hay fever	3	5
Urticaria	-	1
Mixed allergy	7	10
Average duration of symptoms prior to injection of E.D.	51mos.	56 mos.
Average duration of observation since first injection of E.D.	31 mos.	4.4 mos.
Average no. of injections of E.D.	2.8	2.5
Clinical Results		
Very good	19 (68%)	20 (64.4%)
Good	3 (10%)	6 (19.3%)
Fair	3 (10%)	1 (3.4%)
Poor	4 (12%)	4 (12.9%)

The physical work-up of each patient has usually been carried out only too extensively by a host of other doctors, and mother has all the data in her hand-bag. She knows about eosinophil counts and the sedimentation rates, the dilutions of histamine, and the color of the middle turbinate. (Into what a thralldom these otherwise intelligent women plunge themselves!) The upshot is that little laboratory work needs to be done, and I make a point of not asking for more than is essential at the moment, so as not to heighten the tension in the afflicted parent. I have even discontinued routine Vollmer patch tests during the first visit, when emotions are running highest.

Table 2 shows the results with 60 children in my private practice injected with E. D. over a period of seven years. That the number so treated up to September 1945 was only 29 is merely a reflection of the scepticism which I initially felt about this therapy. But these 29 cases possess a special interest, as the average period of observation since their first injection is 31 months. Group 2b, consisting of 31 patients treated since September 1945, shows a mean period of observation of only 4.4 months.

In Group 2a there were 19 boys and 10 girls. In June 1946 their mean age was 10 years. The mean duration of allergic disorders was 51 months, as compared with 28 months in the clinic group. The children were older, sicker, overtreated, and undisciplined. My treatment consisted of one or more 2 cc. injections of E. D., plus reassurance and the lifting of dietary restrictions that had been imposed by other doctors. Children with eczema and paroxysmal asthma received one injection of E. D.; and nine weeks later, if their symptoms had not completely cleared up, they received three more, one week apart. Children with chronic perennial asthma and hay fever received three initial injections one week apart. Two weeks after the last injection the mothers were instructed to introduce rapidly, but one at a time, all the MOST forbidden foods and to watch for reactions. They were also to allow the child a normal way of life. The children showed delight, and in the end most mothers also.

Of the 29 children in Group 2a, 19 recovered completely and rapidly. Of these: nine needed only one injection, six had three injections and four had more than three injections. The average number of injections for Group 2a was 2.8.

There were four complete failures. Two were girls of 12 and 16 with severe generalized eczema of many years' standing. One was a boy of 13 with perennial asthma who had been bedridden since the age of three and who has now been in Arizona for two years without improvement. The fourth was a girl of ten with moderate asthma whose parents, when she failed to recover completely from one injection, refused to bring her for more, though they have kept me advised of her condition.

The best results were with paroxysmal asthma and early eczemas; good to fair results were shown with hay fever.

I have obtained satisfactory up-to-date information from these and other private patients without subjecting them to the expense of an office visit by periodically sending them a form letter asking for

information on an enclosed card addressed to me. (Fig. 2) It is significant, as well as amusing, to observe how fully the parents or the patients often expatiate on their condition in the limited space of a post-card. They like their doctor to ask about them.

I have been { Free of symptoms ....
Improved .....
No better .....

REMARKS: ....
....
....
....
(Signature)

FIG. 2

Because the number of my private allergic patients rose sharply in the winter of 1945-6, and because of the relatively short period for observation, I present as a separate group, 2b, the 31 allergic children who received their initial injection of E. D. in that season. These children were younger, ranging from 3 months to 15 years. There were in this group three children with severe gastrointestinal allergy who responded promptly to one injection of E. D. The results were as good as with the previous group, but perhaps the winter of 1946-7 will bring relapses.

Group 3 — Private Patients, Adults

As a pediatrician I am loathe to treat adults, but in the past seven years I have been put into the position where I was virtually compelled to treat a small number of allergic adults, as other physicians in New York were either unfamiliar with E. D. or unwilling to use it.

From 1939 to 1946 (mostly in 1944-5) I have injected 68 private adult patients with E. D. Four of these did not report back to me after the first injection, and they are excluded from this report. From the rest I have heard regularly at their will.

Except in a few instances, all of these adult patients came to me as a last resort. Some of them were referred to me by physicians who had unsuccessfully tried everything on them and then, as one candidly said, passed them on to me to get rid of them. Many of them were broken spiritually, physically, and financially by their struggles with their allergic ailments and their "specialists". Some of them came to me because through bizarre channels, word had reached them of a "new cure". Some of them had to be supported into my office; others were hospitalized or bedridden at home. To prepare them for treatment with E. D. was often difficult. The men protested giving up, even for a few weeks, tobacco and to a lesser degree alcohol, and women, their sleeping pills and cough potions. Many of them were so afraid of normal food that they had for years subsisted on four or five dietary items.

As with Group 2, these adult patients were divided into two categories: 3a comprising 34 patients who received E.D. injections between January 1939 and June 1945; and 3b comprising 30 patients who were treated in 1945-6. (Table 3)

In 3a were 27 women and 7 men. Their mean age in June 1946 was 43.6, and the average duration of symptoms was 17 years. The mean period of observation was 27 months and the average number of injections per patient was 4. Of those 34 patients 19 had unusually severe asthma, nine had hay fever, and the rest had asthma and hay fever. As I said before, many were in a state of acute anxiety about themselves.

Only 11 of the 34 patients obtained complete relief that lasted for the period of observation. Six others showed good improvement, and seven some improvement. Ten did not benefit.

The record with these adults falls considerably short of our success with children. At the same time, considering that they had had to run the gauntlet of the medical world, passed on from doctor to doctor with the consequent mental and financial trauma, I am well satisfied with the salvage that was effected.

TABLE 3

RESULTS OF ETHYLENE DISULPHONATE THERAPY IN PRIVATE PATIENTS, ADULT, TREATED BETWEEN 1939 AND 1946

	Group a	Group b
	Treated Initially Jan. 1939-June 1945	New Patients Treated Sept. 1945-June 1946
No. of Patients	34	30
Sex: Male	7	14
Female	27	16
Average Age	43.6 yrs. (in June 1946)	38 yrs. (in June 1946)
Diagnosis		
Asthma	19	21
Eczema	-	2
Hay fever	9	7
Multiple allergy	6	-
Average duration of symptoms prior to injection of E. D.	17 yrs.	12.7 yrs.
Average duration of obseration since first injection of E.D.	2 yrs. 3 mos.	5.5 mos.
Average no. of injections of E.D.	4	3.4
Clinical Results		
Very good	11 (32%)	10 (33.3%)
Good	6 (18%)	7 (23.4%)
Fair	7 (20%)	3 (10%)
Poor	10 (30%)	10 (33.3%)

The results with Group 3b, seen for the first time in 1945-6, follows the pattern of 3a. The average period of observation since the first injection of E. D. was only 5½ months. They were younger, and the duration of their symptoms prior to E. D. therapy was shorter. It will take two more years to judge the efficacy of the improvement that many of them have shown.

Summary

I report my therapeutic results with 177 patients, children and adults, clinic and private, to whom I have given injections of ethylene disulphonate for their allergic disorders.

1. The 53 clinic patients were all children, and the circumstances were such as to reduce to a minimum the psychological factors. As to 20 of the patients, they were closely controlled by a parallel

group of children, of equal number but manifesting somewhat less severe symptoms, who had equally intensive investigation and treatment, except that they received no E. D. The results of the controlled test, published in 1943, justified a more extensive use of E. D. War conditions compelled me to abandon the control group, and, so far as clinic patients are concerned, my present report covers my follow-up with the original treated group and my experience with 33 additional clinic children. Of the original 20, five drifted away; twelve remained symptom free up through June 1946, the end of our period of observation; three called for further injections after an average lapse of 25 months and then remained symptom free. Of the 33 new clinic patients, 22 showed very good results; two, fair results; and five were failures.

TABLE 4

THERAPEUTIC RESULTS WITH ETHYLENE DISULPHONATE IN 177 PATIENTS

	Total Number of Patients	Very Good (80-100%)	Good (50-80%)	Fair (30-50%)	Poor (less than 30%)
Asthma					
Clinic Patients, Children	26	22	2	1	1
Private Patients, Children	29	21	3	2	3
Private Patients, Adults	40	9	10	8	13
Hay fever					
Clinic Patients, Children	2		1		1
Private Patients, Children	8	3	2	1	2
Private Patients, Adults	16	8	3		5
Eczema					
Clinic Patients, Children	6	5	1		
Private Patients, Children	5	2			3
Private Patients, Adults	2				2
Urticaria					
Clinic Patients, Children	3	2	1		
Private Patients, Children	1	1			
Angioneurotic Edema					
Clinic Patients, Children	2	2			
Multiple allergy					
Clinic Patients, Children	14	5	4	1	4
Private Patients, Children	17	9	4	3	1
Private Patients, Adults	6	3	1		2
Total	177	92	32	16	37
Percentage		52%	18%	9%	21%

The detailed break-down of the duration of symptoms and period of observation is shown in Table 1.

2. The 60 children treated as private patients show very good results with about two-thirds of them, and failures with about one-eighth. Table 2.

3. The 64 adults treated privately were mostly severe chronic patients. My results here were very good as to one-third of them, and failures as to another third. The other third showed some improvement. See Table 3.

In a breakdown of the 177 patients by the character of the allergic symptoms (Table 4), we find that the favorable response is somewhat less marked among hay fever victims (11 very good results and eight failures out of 36 patients) than with asthma and eczema. But the difference is not sufficiently pronounced to be significant.

Conclusions and Comments

The allergic syndrome starts with the familiar physical manifestations in a susceptible individual. Later, in many children, the over-solicitude of an over-indulgent or hostile parent is apt to convert the sensitivity to certain allergens into a conditioned reflex by which the child gets what he wants. In both children and adults the elaborate medical treatment evolved in the United States by specialists over the past decades has proved a powerful incentive to hypochondriasis,—a far more serious and stubborn infirmity than the physical disturbance that, in these allergic patients, was its point of departure.

My experience leads me to believe that, so far as the physical disability of the victim of allergy is concerned, ethylene disulphonate suffices in a large number of cases to restore the normal body processes. Where the physical disability has not yet become compounded with psychic sequelae, E. D. usually brings about a gratifying and lasting restoration of health, promptly and inexpensively. But where the patient has not been caught in time, the physician must supplement E. D. by simple psycho-therapy, persuading the patient and his family to relax, encouraging the patient to lead a normal life, and minimizing rather than magnifying the trouble; in a word, restoring the patient's belief in his own health and enjoyment of life. With children this is usually easy, for their moral as well as physical resilience often seems inexhaustible. It is also frequently possible with adults. But when the adult victim has been a chronic sufferer for decades, and has worked himself into an obsessional neurosis by dint of endless treatments, and ruinous expenditures, the outlook is not good.

It follows from the foregoing comments that, in the author's opinion, the prognosis for all victims of allergy in their first or early attacks is today good. If we treat the new victims as they appear, then with the passing of the years, as the old and hopeless cases pass on, we may hope to reduce the problem of allergy to the dimensions it used to have in this country and that it still has in Great Britain and on the Continent.

Owing to the notable restraint with which ethylene disulphonate has been promoted in the United States, many physicians do not know about it. The initial work was done in Belgium by Henri Maisin, who holds the chair in Medicine at the Faculté de Medicine at the University of Louvain. In the spring of 1946 his government sent him to the United States as a member of a medical commission to survey medical progress made here during the recent war. He informed me then that E. D. was now

widely used by Belgian general practitioners to handle the allergies and seemed to be meeting the allergy problem.

I do not know why E. D. helps most victims of allergy, any more than I can explain the body chemistry of many other empirically successful and universally accepted pharmaceutical products. With my empirical results running satisfactorily as they do, I naturally dismiss as secondary the arguments based upon bio-chemistry that have been engaging the attention of those who are interested in this preparation. There has also been raised the question of controls. The author's first article (1), was rigidly controlled in order to compare the results of the E. D. treatment with the standard treatment involving skin tests and desensitization. Controls are an invaluable scientific device for refining our knowledge of what happens, and one can devise many controlled experiments that will be useful in shedding light on E. D. But laboratory workers and scientifically minded physicians must never forget that the absence of completely worked up controlled experiments does not belie the evidence of obviously satisfactory therapeutic results. In chronic diseases where all other treatments have failed, the patient himself is a control. Are we going to dismiss our observations on private patients as unscientific and worthless merely because, in private practice, we cannot segregate a "control group"?

The recent war interrupted research work with E. D. abroad. In the United States there has been a sprinkling of articles dealing with it. In my opinion the most significant have been a series of articles by Dr. Clifford L. Bartlett (2), an article by Dr. W. Ray Shannon (3), and the paper read by Dr. W. Merritt Ketcham (4), at the annual meeting of the Southern Medical Association at Cincinnati, Ohio, November 12, 1945.

Lately a series of brief reports (5), has appeared in the medical press by physicians who have been unable to obtain successful results with E. D. The number of cases that they discuss is small and the period of observation is short. Perhaps the reasons for their failure would emerge if full information were available concerning the detailed handling of the patients.

The author wishes to conclude with an observation which may sound like a truism but one that is nonetheless sometimes ignored. It is the duty of physicians to approach new treatments with reserve and the most exacting demands for evidence. It is also their duty to approach new treatments with an open mind and an eagerness to discover new and simpler and less expensive ways to help the afflicted.

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1 East End Avenue

THE TREATMENT OF CARBUNCLES WITH SALICYLIC ACID

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Since olden times the treatment of carbuncles was a surgical operation made by means of early single, multiple or crucial incisions, removal of the necrotic tissue with curette and scissors, very often cauterization to excise and destroy as much as possible of the infected parts.

The results were not satisfactory, and this treatment never had the approval of all surgeons. Riedel thought that treating carbuncles with incisions only, was not a radical enough procedure, and in 1891 suggested another operation consisting of a total extirpation of the entire carbuncle and of the affected tissues down to the underlying fascia.

Under a general anesthesia, all these operations are very simple, rapidly performed and do not require any special surgical ability. However, after the operation, especially when it is not possible to repair the lack of skin with a plastic operation, numerous dressings are necessary, and these are very painful for the patient and generally disappointing to the doctor. To be aware of this, the surgeon should not limit himself to doing the operation, but should also dress his patients or be present at the dressings. A carbuncle treated this way takes a long time to heal, and in the end almost always results in a deforming scar. Nevertheless carbuncles continue to be so treated up to our days.

A few years before Riedel, another surgeon, Aristide Verneuil, expressed the opinion that carbuncles could be treated in a more simple way without any operation. At the meeting of the French Academy of Medicine on January 12, 1888, Verneuil reported that he was not in favor of the usual method of treatment and that in the last five years, since 1883, he had treated carbuncles successfully without any operation but with the sole use of antiseptics. Instead of incising carbuncles, he used to spray them many times a day with a 2 percent solution of carbolic acid and in the intervals covered them with a wet dressing of the same solution. The most important part of the treatment by Verneuil was the suggestion that all incisions should be completely eliminated. However, the dangers due to the incisions were probably not sufficiently emphasized and seem to have been generally overlooked at the time, more attention being paid to the use of antiseptics. To follow Verneuil's instructions of frequently spraying carbuncles requires much time and was too complicated a method to be accepted by the majority of surgeons. In consequence the so-called radical treatment by incision continued to be used and is still in great use.

Since all diseases resulting from gram-positive micro-organisms can be cured by the use of penicillin, carbuncles are at present also thus treated, either with local application or with endovenous or subcutaneous injections. In the near future when the use of penicillin or antibiotics will be the standard treatment, carbuncles will no longer be considered surgical diseases. However, there is always the possibility that some cases will not respond to these treatments, either on account of variation in the degree of sensitivity of different strains of staphylococci or on account of the variation of absorption of different patients. In these cases it is well for the surgeon to be familiar with all the means at his disposal in treating carbuncles, inasmuch as even without penicillin it is possible to obtain a perfect recovery.

The first and most important rule is that absolutely no incision, no matter how small, is to be made on carbuncles and that no bleeding, no matter how slight, is to be provoked, as bleeding increases the virulence of the pathogenic micro-organisms. When this rule is followed, any antiseptic that penetrates the carbuncle is good, even if it is the mild solution of carbolic acid used by Verneuil. The author has found that salicylic acid in small crystal form is the most convenient and effective antiseptic. It penetrates the carbuncle without the need of any incision and without causing any bleeding.

About ten years ago, after having treated some carbuncles by means of incision and cauterization and having witnessed the suffering of the patients during the dressings, it seemed to the author that the method employed by Verneuil was more humane and worthy of a trial. Accordingly, in the next case the author decided to disinfect the carbuncle instead of incising it. For an antiseptic, crystals of salicylic acid were used as more convenient and simple than the solution of carbolic acid. In the first cases, before applying the salicylic acid, a small incision was made on top of the carbuncle to facilitate the entrance of the acid, but the author soon found that no incision was necessary inasmuch as the salicylic acid has an almost selective action of penetration through the pustules. Later, the author also abstained from incising carbuncles that very definitely seemed to require a surgical operation and thus prevented the bleeding that is always dangerous in treating carbuncles. No matter how small the pustules are on top of a large carbuncle, salicylic acid applied on it will act in eroding the pustules and fusing them together. There will then result an opening large enough to permit the elimination of all necrotic tissues without resorting to an incision.

The result of this method of treatment proved so satisfactory that since then the author has adopted it for all carbuncles, large or small, that have come under his care and always with good results. This is especially evident in carbuncles of the face. In these cases, not only is the healing rapid, but the resulting scars are reduced to a minimum. This method has also been found to be very effective in treating carbuncles in confirmed diabetic patients.

Conclusions

In conclusion, carbuncles should be treated as follows:

First, the normal skin surrounding the carbuncle should be cleaned with soap and water. If shaving is necessary, much care should be exercised with the razor so that there will be no abrasion and no bleeding. No tincture of iodine or other antiseptics should be used on the skin.

Second, some zinc oxide adhesive plaster, two or three inches wide, should be suitably cut and placed on the normal skin around the carbuncle and its immediate margins, in such a way that only the carbuncle and its very immediate borders are exposed and the normal skin surrounding it is covered and protected.

Third, a very large quantity of salicylic acid in small crystal form should then be applied and spread on the area where the carbuncle is exposed, this area to be covered entirely with a thick stratum of acid. Then a large piece of adhesive plaster should be applied over the entire region in order to keep the salicylic acid in place.

No other dressing is necessary, but if a thick pad of sterile material is applied over the plasters and secured with a bandage it serves to immobilize the affected part and gives the patient more comfort.

Only every twenty-four hours, or every other day, are all plasters and all medication to be removed and a new medication, with new plasters and a new large amount of acid, to be applied in the way already described. It seems that carbuncles whose dressings are changed infrequently, every two or three days, heal quicker than the ones which are dressed every day.

From the first day, the swelling of the surrounding tissues is diminished and the general condition

of the patient is improved. After a few days of treatment, the appearance of the carbuncle changes, and after about ten medications all pus disappears and the wound acquires a healthy aspect. When no more pus is seen, the carbuncle can then be treated with sterile material or with a mild antiseptic.

All dressings should be made with great care and gentleness, and the adhesive plaster removed without producing any bleeding. No wiping, rubbing or cleaning of the surface of the carbuncle should be attempted, absolutely no instruments should be used to pull out or remove the necrotic tissues forming the core of the carbuncle, and no cutting or curetting should be resorted to in order to extract the core. The continued application of new salicylic acid in large quantities is sufficient to soften any core, and to eliminate it.

It is the author's opinion that in treating carbuncles, the prevention of bleeding is the most important element. It is true that bleeding could be prevented by the use of a caustic, but the same results can be obtained by the use of salicylic acid, a more simple and less painful method, one that can be used in the doctor's office or in the home of the patient and one which leaves only a small scar.

The author would like to add that this method of treatment has been adopted by all surgeons who have seen it in use. They are all convinced, as is the author, that this is the most simple, painless and efficient way of treating carbuncles.

43 West 11th Street.

SKELETAL CHANGES ASSOCIATED WITH THE USE OF CRYSTALLINE CHYMOTRYPSIN IN AN APPARENTLY RADIO-RESISTANT GROWTH

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San Francisco, Calif.

The patient, a white woman, aged sixty-five, underwent a radical mastectomy for a tumor of the right breast on September 29, 1945. No involvement of the regional lymph nodes was observed. The tumor was diagnosed as a scirrhus carcinoma on the basis of a frozen section and the diagnosis was subsequently confirmed by the paraffin section. (Fig. 1).

Two days prior to the operation roentgenograms were taken of the upper skeleton and nothing was found by the roentgenologist except a few arthritic deposits. On the basis of both objective and subjective evidence, therefore, the absence of metastases preoperatively is clear.

Early in the spring of 1946 the patient began to complain of intense pain in the shoulder and sacral regions. Roentgenograms of these regions were taken on April 6, 1946, and the suspicion of postoperative metastases was confirmed. The malignant involvement appeared especially conspicuous on the rim of the left glenoid scapula (Fig. 2) and pronounced destruction was clear in the left inferior pubic ramus (Fig. 3).

On April 20, 1946, roentgenotherapy was commenced and the last of twelve treatments was given on May 3, 1946. The total dosage comprised 2250 R. over the sacrum and 2100 R. over the shoulder.

No clear evidence of amelioration was noted as the result of the radiotherapy: the intensity of the pain was undiminished and the general condition of the patient continued to grow worse with extending pain, decreasing strength, anorexia and loss of weight.

On May 26, 1946, the patient was placed on parenteral chymotrypsin. Sixty milligrams of crystalline chymotrypsin dissolved in 5cc. of Ringer's solution were given intramuscularly every five days until September 12, 1946, when another set of roentgenograms was taken. Pronounced repair was evident in both of the later plates (Figs. 4 and 5).

The subjective improvement of the patient had paralleled the objective findings. Following the second intramuscular injection of crystalline chymotrypsin the patient reported a notable decrease in pain in the affected areas; her appetite improved and she described an increased sense of well being which was apparent objectively. After the third injection, all pain disappeared. Although the patient has remained free from pain during the past four months, she is still receiving chymotrypsin therapy. The course of skeletal repair will be followed in later roentgenograms.

Comment

It is clear that the regenerative changes occurring in this case can not with certainty be ascribed to either the effect of radiation or chymotrypsin. An examination of the literature of the subject indicates that spontaneous regeneration unassociated with therapy offers an extremely improbable explanation of the findings. Favorable response to radiation is frequently associated with an alleviation of pain; no such alleviation was observed here. On the other hand, each of the first three injections of chymotrypsin was followed by a progressive diminution in pain in the affected areas, and after the

third injection complete relief of pain was reported by the patient.

Tumor destruction as a result of the parenteral administration of crystalline chymotrypsin has been observed recently in the mammary tumors of C3H mice.

Although encouraging clinical results have been obtained following the parenteral administration of crystalline chymotrypsin in neoplasms not involving the skeletal system, such cases do not lend themselves to as objective an appraisal of tissue changes as do those cases involving the skeletal system. Since definite, though less spectacular, roentgenographic changes have been observed in secondary growths of the skeletal system following the use of crystalline chymotrypsin, the publication of this case is intended *solely* as a reference toward which possible future findings may contribute a statistical relevance.

Although the use of mixed therapy increases the difficulty of evaluating the effectiveness of chymotrypsin in cancer, the use of this or any other agent at the cost of depriving the patient of the standard modalities is to be deprecated. Since chymotrypsin in the doses administered is without apparent toxic effect, its use does not interfere with any other therapy.

642 Capp Street.

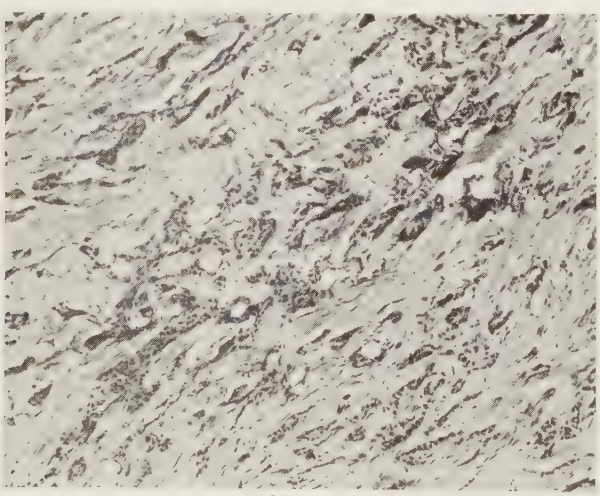

FIG. 1

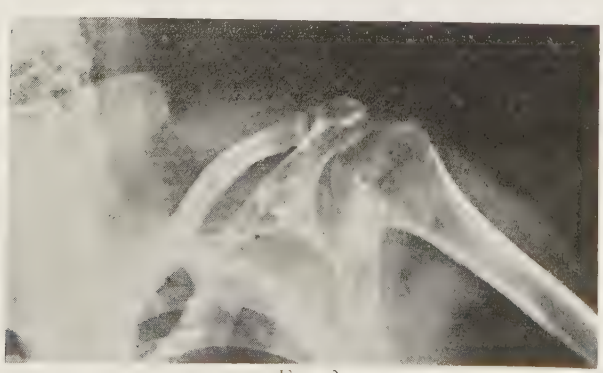

FIG. 2

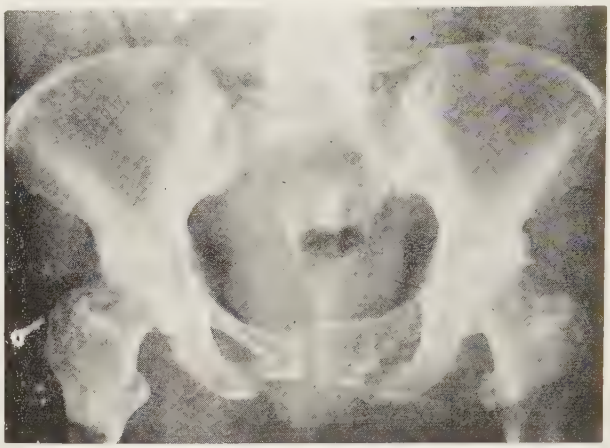

FIG. 3

FIG. 4

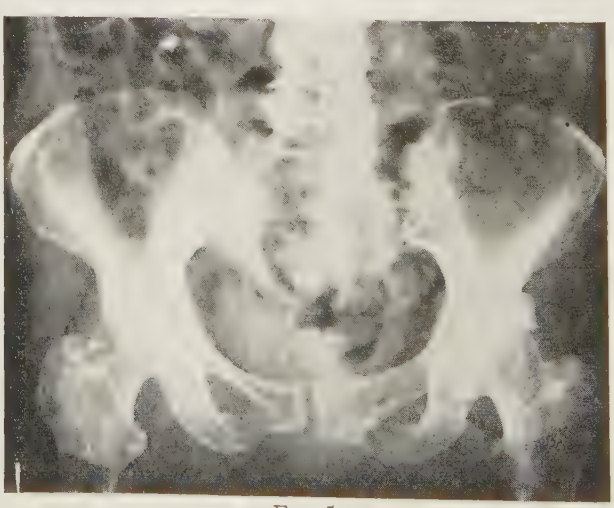

FIG. 5

THE FRONT OF THE FOOT

LEONARD D. FRESCOLN, M. D.
Philadelphia, Pa.

The anterior portion of the human foot is found to be an important part in progressing forward in walking and consequently is subject to a great variety of disturbances. By this portion is meant the five metatarsals with their ligaments (transverse, long and vincula vasculosa), the interosseous muscles (dorsal and plantar with second digit as the axis for abduction and adduction), the long and short flexor and extensor tendons, abductor and adductor of great toe (hallux). (transversuspedis) lumbricales, accesorius to long flexors, the phalanges, digital and dorsalis pedis arteries, branches of the median and lateral cutaneous nerves, fat, skin, ad the formation of the dome of the anterior arch—the median part higher.

In progression, the force of the adductor of the great toe together with the alternate flexion and extension of the toes with separation and then approximation of the toes, brings about walking—the two feet acting alternately. Some individuals, who have lost the use of the hands, have become quite expert in the use of the toes; but ordinarily the constriction brought about by the use of shoes prevents much free exercise of the toes. The new-born child has not as yet formed the arches of the feet, especially the anterior or transverse, as the particular function of walking has not yet begun.

Let us consider some of the abnormal conditions met in this part of the body. There should normally be the regulation number of digits in the human, but occasionally a child is found with only four digits for the foot; other departures from the usual consist in extra digits—as many as eight for each foot. There may congenitally be a second great with or without an extra metatarsal, or with a branched metatarsal; one foot or both may be involved. There may be simply a pedicled, rudimentary little toe, such as can be readily ligated or snipped off early. A draftee was rejected for army service because of having no toes. Recently a colored girl was seen having metatarsus varus of each foot, later corrected by osteotomies.

Pain in the fore part of the foot may be due to a flattened anterior arch, the heads of the metatarsals pressing on the nerves between (metatarsalgia); the mid-portion of the ball of the foot being then pressed down develops painful callus. This needs a felt (or French rubber for tender skins) pad just back of the heads of the three middle metatarsals, about 3/16-inch high or more. The pain is then relieved and the callus disappears, if the pads are of sufficient height. Or there may appear a plantar wart (verruca) farther back. There are three ways of treating this: one is by x ray exposures; another is by excision; and the third is by local Bismuth injections. Painful conditions about the front of the foot seem to be prevalent among women because of abuse of the foot by fantastic shoeing, and especially about the time of the menopause when general nervous upset is present.

The real determination of a fallen anterior arch is thru the attending concomitant conditions such as callus, corns (clavi) hard and soft, hammer toes, hallux valgus, bunion (bursitis) and ingrown toenails. Neglect in preventing the development of these conditions is unfortunate indeed. Children, men and women alike, should wear proper shoes if they wear them at all. The shoe should have a steel shank if there is need of felt supports, and a stiff counter; the median edge should be practically straight; the shoe should be about ½″ to ¾″ (women) longer than the foot itself and not have pointed toes nor a heel over 1″ high. If corns have already developed, pressure should be removed and the thickening can be removed surgically, or by applications of collodion with 30 grs. ac. salicyl. to the ounce after soaking in warm boric solution. Hammer-toes generally need capsulotomy. Acute bunions should have hot antiseptic soaks and rest at first, chronic bunions (associated with hallux valgus) may be excised at the time of the removal of exostosis and straightening of the first digit as by Kellar operation, using the long extensor medially for a bow-string effect; or bursa may be inserted for arthroplasty. (Or Mayo operation may be done). An ingrown toe-nail generally demands removal of at least half of the nail where the trouble exists. Nails should be kept clean and trimmed straight across. Sometimes a paronechia requires surgical treatment; thickened nails may be due to fungus infection.

Buerger's disease may be met, not only in Russian Jewesses and Irish, but in those of other races. It is an endarteritis obliterans, manifested in cold and numb toes, painful toes, absence of pulsation of especially Dorsalis Pedis artery and generally an associated "athlete's foot." These cases should have the arch correction, avoid any constriction, wear warm socks, avoid use of tobacco, soak feet in warm boric solution daily, have permanganate or other application for the fungus infection and Pavaex Boot treatments. Surgical procedures have been tried.

Other conditions met with which involve these parts are frost-bite, Raynaud's symmetrical gangrene, globus tumor, fractures, dislocations, burns, scalds, wounds, osteomyelitis, foreign bodies, webbed toes, trophic ulcers, arthritis, gout, acroparaesthesia, erythromelalgia; these should be treated in the usual manner for such conditions in general.

222 South 46th Street.

THE SECRET INSTRUMENT; IT'S USES, INDICATIONS, AND CONTRA-INDICATIONS

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Thinking backwards, of an experience of over thirty years, a very large general practice of medicine, falling in and out of the many pitfalls along the pathway leading to a conclusion of a successful professional career, coupled with the experience of many joys and sorrows that come to one so engaged, has prompted the author to select the above subject. The author is confident that those who read the article will find but little that is new. The subject is an old one, and to the author an interesting one. However, it is sometimes well to review the older subjects.

How many of us get in too big a hurry to terminate delivery; apply the forceps too soon, thereby producing ill effects on either the mother or the child or both of them? How many of us, I wonder, remember that after all the woman has to have the child and no matter what happens the doctor can't have it for her?

In this connection it may be interesting to some to review some of the historical material. Three years before the Massacre of St. Bartholomew in 1669, William Chamberlain, a Hugenot physician, fled from his home in France to London, England. There it is said he married a beautiful girl and raised a very large family, two of whom were named Peter. Both of them became physicians and were professionally very prominent in the city of London. The younger Peter was very arrogant, contentious, and was in continual conflict with his brother physicians. On one occasion he came near being expelled from the Academy of Arts and Sciences of London for boasting that he and his brother, and none others, excelled in the subject of difficult labor. For this outburst he was arraigned for punishment before the College of Physicians. When this happened it was the first record of a secret instrument which remained in the Chamberlain family for more than three generations. The same secret being the foundation of their boast that the Chamberlains, and they alone, could be regarded as super skilled obstretricians. The secret enabled them to grow very wealthy by the practice of their hidden method of dealing with difficult labor.

However, posterity finally condemned them for depriving the world of a professional knowledge that might have saved thousands of lives and untold suffering during a hundred years.

The younger Peter had a son named Peter who was a great man, but had ill-directed talents. He did have an amount of inventive genius. To this man who made such a mark in his time, the invention of forceps is credited. He did however inherit the secret from his father, who had obtained it from his brother, Peter Sr., this the record plainly indicates. The younger Peter had a son named Hugh, who worshiped frequently at the shrine of Bacchus and was very extravagant. He decided to make the best of his inheritance. He let it be known that he would part with the secret for a consideration; a secret that had remained in his family so long. He went to Paris to demonstrate the instrument. The patient was a dwarf with a narrow contracted pelvis. At this time he made a complete failure.

When next he was heard from he was in Amsterdam. He had better fortune there than in France, and succeeded in selling his secret to the College of Physicians for $10,000.00. This institution immediately had a law passed which forbid any person to practice medicine in the town, who did not have the secret instrument possessed by the college which it had just purchased.

The unjust traffic continued until the middle of the 18th century, when two public spirited young men took a course in medicine at the College of Physicians, paid the price of the secret and published it to the world. It was a single blade of an obstetrical forceps. Soon after the other blade was found. The Chamberlain instrument was heavy and bunglesome. The blade was too thick. It was difficult to introduce when the head was high, and it was said to have been very difficult to lock. In 1747—Levret a Frenchman soon improved on the Chamberlain Instrument and presented his forceps to the Academy of Medicine and Surgery that year.

Forceps is an instrument to remove the foetus away from the uterus where there is a deficient amount of *vis-atergo*; or used to apply the *vis-atergo*. The blades must always fit the pelvic course. Their application is to be remembered by the three L's: "Left blade, Left hand, Left side of the woman." Only a few of the most important indications will be mentioned.

1. Short forceps may be used when the head is low on the floor of the pelvis; sometimes rotation is accomplished by their use.

2. The axis traction will be mentioned in passing. They may be easily applied to any forceps; their advantage being in the minimum amount

of force which must be used to deliver, the rotation and flexion not being interferred with. Disadvantages to be reckoned with, are fractures of cranial bones of foetus and moulding.

The proper application and use of forceps is very important. This writer has seen some cases of improper use of them with results approaching butchery. He was called in consultation in one case where the doctor had pushed the blades through the vaginal vault.

In another case a small portion of cervix was removed with the head. After observing the rule of the three L's, when the right blade is introduced the handles will come together after rotation. The main danger then is the slipping of the forceps. It was the author's custom to firmly tie a sterile towel around the handles, use the index finger for a guide, placing it on the head of the child. If the forceps slip, a bad tear and other complications may be the result. One should never, under any circumstances, use more strength than lies in their arms and shoulders. I have been repeatedly shocked to see some operators pulling a straight pull on the forceps, bracing themselves with all their might, many times having a second party to pull them. Such action is not only inexcusable but almost criminal. The handles of forceps should, of course, be carried over toward the woman's abdomen in all cases save one. They may be used as rotaters as in persistent R. O. P. in a side to side pendulum movement. The most important indication for the use of forceps is perhaps impaction at any given point of the birth canal for two hours. (Thumbs rule) The first degree of pelvic contraction over size of fetal head.

In threatened maternal life such as chronic valvular heart disease and wasting diseases such as chronic pulmonary tuberculosis—delivered at once if os is dilated.

We will also mention marginal placenta previa. Threatened fetal life should not be overlooked. If the fetal heart sounds begins to slow quickly from 140-16-, delivery should be made at once. This condition is often preceded by a sudden gush of meconium if in breech presentation. The Scanzoniz method is always indicated in persistent R. O. P.

Some of the contra-indications are;

1. Mechanical obstructions such as tumors and carcinoma of the cervix; in the latter the cervix can not dilate.
2. Non-dilation of the os.
3. Contracted pelvis below the second and third degree.
4. Distended bladder and rectum.

The fetal contra-indications are many;

1. Non-engagement of the presenting part.
2. Non-rupture of bag of water.
3. Over-size of fetal head.
4. Impossible cases of labor-use forceps only as rotaters, never as tractors.

The dangers of use of forceps refer to both maternal and fetal.

1. Fractures and dislocations—dead fetus.
2. Total compression of the vital centers may result in epilepsy in later life.
3. Cerebral injury with hemorrhage.
4. Paralysis of face as well as injury to face and scalp.

It is never a loss of time to critically examine every child delivered by forceps for dislocations, especially of the shoulder joint; it happens very frequently. The writer saw one case incorrectly diagnosed as paralysis of the arm following forceps delivery; this was afterward diagnosed as dislocation of the shoulder joint.

Let us pass on to some of the maternal dangers.

1. Contusion of the birth canal.
2. Separation of the pelvic joints.
3. Vulvar thrombosis and septic infection.
4. Lacerations of the cervix.

Laceration of the perineum is the big bugaboo and should not be considered as such, for if the proper technique is used there will be but little, if any, tear. The obstetrician is master of the situation and does not have to let the head pass until he is ready to do so. Human tissues are very elastic and if given time to expand sufficiently there will be few lacerations with or without forceps delivery. Simply apply the forceps and hold the head back until sufficient dilation of all parts is effected, then let the head slip out. There are many physicians who apply forceps without assistance; it's bad practice and should be condemned. An assistant may aid in saving human life.

An assistant offers great protection to the physician in charge. Not only that, any woman who is in the very throes of labor should have every means to make her as comfortable as possible.

It must be added in passing that this writer has placed a pregnant woman across the not too clean bed, one foot upon one chair and the other upon another, opposite side, given an ether cone to some woman standing by who knew nothing of anesthesia, made the high forceps delivery and thought nothing of it, many, many times. The reason for this—there was a distance of thirty-five miles to professional assistance.

At this point forgiveness is requested for digressing. Once on a very hot August day, the dust six inches deep, (Horse and Buggy Days) enroute home after a hard days work, a woman hailed me with the, "Dr. Hendly you're wanted at once at Bob's", which was a distance of seven miles across country. Upon my arrival I found a woman who had been delivered by a doctor friend of mine forty-eight hours previously. He could not be found. She could not void.

The abdomen had the appearance of full term pregnancy. I had everything else except a catheter; all other means were used to no avail.

As I was leaving for my office to secure a catheter, I noticed a large feather from the wing of a goose lying upon the ground. There was my catheter. After cutting off both ends of the feather I had a nice hollow tube, four inches long, which was sterilized in Lysol and inserted into the urethra. The result was most satisfactory. (Truly necessity is the mother of invention).

The assistant should be a competent anaesthetist. Choice of operation is a matter for the physician in charge. It is the opinion of this writer that forceps are universally applied too frequently and improperly. The physician who is too ready to resort to forceps will deliver more dead babies and inflict more damage on mother and child than one who does not resort to this method so quickly. High forceps, in my opinion, should never be used. It and cesarean section carry the same mortality rate to mother and child. The latter offers less likelihood of infection. The theory that once a "cesarean section" always a cesarean section does not seem warranted. The writer has delivered many woman normally, two and three times after he had previously done a Cesarean operation on them. Of course one should be prepared to recognize symptoms of impending rupture of the uterus, Bandel's rings, etc. When and if they appear there is ample time for the section.

This scribe is not a specialist in obstetrics, the above is based upon his experience as a country doctor, before specialization in general surgery.

Abilene State Hospital

A CASE OF RHEUMATOID ARTHRITIS

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New York, N. Y.

In view of the continuing controversy concerning the efficacy of vitamin treatment in cases of rheumatoid arthritis, the author would like to report the following case history:

Mrs. A, a widow aged forty-eight, first visited my office on February 1, 1945. She had been suffering from arthritis of the hands and feet for a period of twenty-two years. The first attack followed her only pregnancy and childbirth. Attacks succeeded each other at intervals of two to three months, exacerbations following short periods of quiescence. There was no fever, but much pain, sleeplessness, and impaired function.

In 1932, the patient underwent a tonsillectomy and during the same year all her teeth were removed. Later, ultra-violet light and diathermy treatments were given to her. Injections of gold salts were also tried, but she was unable to tolerate them. None of these measures had any effect upon the course of the disease

The author's examination showed a typical uniform symmetrical picture of arthritis deformans in a state of exacerbation. All the joints of the fingers and toes were affected; the soft tissues were atrophied; there were lateral subluxations; movement was very limited and painful. The rest of the examination was negative, with the exception that the tongue showed the characteristic symptoms of glossitis. Therapeutic dozes of niacinamid and riboflavin were prescribed for that condition.

A month after the examination, Mrs. A reported by telephone that she felt generally better and had gained a few pounds. Two months later, she phoned again to say that she was undergoing a new attack of arthritis. She informed the author that she had stopped taking the prescribed vitamins about the time of her first telephone call. She was advised to begin the vitamin dosage again and to continue the treatment indefinitely.

For the past twenty months, since she resumed the vitamin treatment, Mrs. A has not suffered an arthritic attack. She has regained much of the function of her hands and feet; their skin has a normal appearance; her tongue looks much better. On June 5, 1945, her sedimentation rate was 27 mm. in one hour (Cutler method); on October 12, 1946 it had dropped to 17 mm; on December 16, 1946, to 13.5 mm.

838 West End Avenue

Neumann's disease is so named because of Isidore Neumann's description of pemphigus vegetans, a disease which was described in turn by Alibert, Kaposi and Neumann, and further by Unna, who regarded the disease as vegetating erythema bullosum. Neumann made special studies on the histopathology of skin diseases. He was the first to describe, although imperfectly, alopecia cicatrisata.

Although the theory of psorosperrus has not been sustained, the description given to *keratosis follicularis* by J. Darier, of Paris, entitled him to have the disease given his name. Others are said to have described the disease independently, as Morrow (1886) and White. Darier also described pseudoxanthoma elasticum.

Editorials

A Great Foundation and Its Contribution to Medicine

A review of the work of the Rockefeller Foundation for 1946, has just come from the hands of Mr. Raymond B. Fosdick, president. For that year the appropriations for all causes totaled to the gigantic sum of $19,481,576, which was an increase of some $8,000,000 over that for 1945. Ever since the creation of the fund in 1913, the trustees have not hesitated to spend a part of the principal as well as the income wherever "projects were of challenging importance." Subtractions of over $105 millions have thus been drawn from capital, and over $288 millions have been appropriated from income. Under the present philosophy of "soak the rich", one wonders just how long any set-up, no matter how enormous, can survive. In the natural order of all things terrestrial this cannot go on forever.

However, let medicine take delight in all the great good which has come to it through this munificence! We are reminded that "Health like education is not only an individual . . . but a national asset." Individual health is the concern not only of a man himself, but of the great group which we describe as "society." In it there is no distinction of race, color, religious or political views, or rich or poor. Adequate medical care must be the concern of all for all. It is a perfectly tangible and obtainable commodity, but hitherto it has not been well distributed. Hence we are told of vast areas in these United States where relief from pain and postponement of untimely death are not to be had. Some fifteen years ago the Rockefeller Foundation was chiefly concerned with the *cost* of medical care; at this time it is more concerned with *distribution*. In 1946, it underwrote a Health Insurance Plan for Greater New York to the extent of $250,000, which is known as HIP to those who have studied it. Some medical economists have rather bitterly assailed the movement as being "reactionary" and "against the medical profession". Whatever the effect, one may feel sure that there was no intent to bring this about. The question is one of the greatest good to the greatest number.

The City of New York, the United Nations, medical schools and hospitals have been asked to cooperate, and they have either done so or have shown a desire to help. Medical education must be integrated with such a plan for medical care, and here is where group practice may have a golden opportunity. As the report says, concerning the latter, we have far too little knowledge, and it may take some years to work out methods of procedure wherein every doctor will have a chance to serve while, at the same time, securing for himself a reasonable competence as a reward for actual services performed. The report states that this "will require open-mindedness and the realization that conceptions of social justice change from generation to generation." The greater mind, the larger heart must prevail if decay and death are not to destroy our social order or stultify its power to grow, which means about the same thing.

What is called "the magic wand of medical advance", a non-existent agent, seems too much in mind. Advances must come from trained personnel, from long years in laboratories and first-hand acquaintance with techniques which have proven value. Wars always draw upon youth material and destroy it before it has come to full flower. The thought is much too common that we can *buy* anything and everything needful. Not so. We can use money as a means, to be sure, but men and ideas which are workable count even more. To paraphrase this report: the wedding feast must be readied, the champagne is on tap, but no water is at hand to boil the potatoes. "We cannot grow orchids in a greenhouse that lacks coal." However the amount of money *is short*. Endowments have dwindled through panic, depression and excessive taxation "at the source". Of seventy medical schools, twenty-four receive state or municipal support chiefly. All the rest are kept going by tuition fees, endowments from old givers and scattered gifts. "Our medical schools desperately need money for salaries, plant, and clinic use." The Foundation cannot carry more than a fraction of these needs. The total available sum is only some $3 million to $4 million annually. The total budgets ask some $25 millions! The probable answer to the problem is more appropriations from tax funds. Our tax load is now excessive. Just how much more can be borne by the patient man in the street is problematical, but he may yet rebel, and if he does, what then? However, like the British, our Mr. Brittling always sees it through. This is, however, no excuse for an ostrich-like attitude. The Foundation points a warning finger.

Law On Nerves

It has long been the settled law of the State of New York that there can be no recovery for nervousness or mental anguish where there is no accompanying physical contact or injury.

In Mitchell v. Rochester R. R. Co., (1896) 151 N. Y. 107, 110, the New York Court of Appeals held that "no recovery can be had for injuries sustained by fright occasioned by the negligence of another, where there is no immediate personal injury". In Comstock v. Wilson (1931) 257 N. Y. 231, 235, the same court said: In the Mitchell case and in Spade v. Lynn & Boston R. R. Co., 172 Mass. 488, the New York and Massachusetts courts decided "that for practical reasons there is ordinarily no duty to exercise care to avoid causing mental disturbance, and no legal right to mental security. Serious consequences from mere mental disturbance unaccompanied by physical shock could be anticipated, and no person is bound to be alert to avert a danger that foresight does not disclose. The conclusion is fortified by the practical consideration that where there has been no physical contact there is danger that fictitious claims may be fabricated. Therefore where no wrong was claimed other than a mental disturbance, the courts refused to sanction a recovery for the consequences of that disturbance. Here there was more. The defendant should have foreseen that a collision with the car in which plaintiff's testatrix was a passenger would cause injury to the passengers. She did collide with the car through lack of care, and she did cause injury to the plaintiff's testatrix. That injury was not confined to frights. The fright was only a link in the chain of causation between collision and fractured skull. The collision itself, the consequent jar to the passengers in the car, was a battery and an invasion of their legal right. Their cause of action is complete when they suffered consequent damages.

"We do not say that in all cases the courts will hold a defendant liable for remote physical injuries resulting from nervous shock. Here the physical injuries are not remote, either in time or space. They were almost immediate and the evident result of the defendant's lack of care. No slight physical injuries in addition to those resulting from the shock would fortify the plaintiff's claim." Whether the fractured skull was the proximate result of the shock was held to be, in that case, a question for the jury.

In the Comstock v. Wilson case, the plaintiff's testatrix, after the collision between the two cars, stepped from the car in which she was riding, fainted and fell to the sidewalk, fracturing her skull. It was held that a request by the defendant to charge that "if the jury find that if the deceased, at the time of the collision sustained only shock or fright, without physical injury, they must find for the defendant"; this was properly refused.

Both these leading cases were discussed and followed in Edward v. American Hawaiian S. S. Co., 187 Misc. 723, 65 N. Y. S. 2d 433, decided October 14, 1946, which was an action under the Jones Act by a seaman. It was there alleged that the plaintiff, while employed as a cook and baker aboard a certain vessel, was "mistreated" by the officers thereof and was threatened with bodily harm, causing him great mental anguish, as a result of which the plaintiff alleged that he suffered a severe phychoneurosis, for which he claimed damages of $15,000.

Special Term of the Supreme Court after stating the prior law as above concluded: "The principle declared in Mitchell v. Rochester Railway Co. supra has been followed in many subsequent cases. But it has also been criticized by eminent textbook writers as well as by courts in other jurisdictions. The decision, however, still remains the law of this state.

"The fact that this cause of action is brought under the Jones Act does not change the rules applying to actions based upon alleged negligence. The argument that the word 'mistreated' imparts physical contact cannot be accepted. If plaintiff intends to allege such contact he should do so in the complaint, and not depend upon a conclusory term as the word 'mistreated'." The defendant's motion to dismiss the complaint was therefore granted, with leave to the plaintiff to serve an amended complaint.

Distinction Between Negligent and Wilful Acts

However, in Bergen v. Rubenfeld, 66 N. Y. S. 2d 895, the New York City Court, Special Term (Oct. 23, 1946) held that counterclaims alleging that the plaintiff, through positive, willful and malicious acts, caused the defendant to become nervous, sick and upset, necessitating medical and legal advice, stated a cause of action for damages as against a motion to dismiss.

The plaintiff cited the Mitchell v. Rochester Railway Co. case and a recent Special Term Case, Kaufman v. Israel Zion Hospital, 183 Misc. 714, 51 N. Y. S. 2d 412, as authority for his contention that the counterclaim did not constitute

a cause of action. The court, however, said: "In both of these cases the real gravamen of the charge was negligence and they both held generally that mental suffering or disturbance, in the absence of accompanying physical or corporeal injury, would not give rise to a recovery if it resulted from negligent or careless acts as distinguished from one that is wilful. In subsequent cases, however, the courts have placed a limitation upon this general rule to the effect that where the acts complained of were wilful and malicious, mental suffering might be a subject of compensation. The acts of the plaintiff complained of by the defendant in her counterclaims, were not acts of negligence or carelessness, but positive, wilful and malicious and are therefore the basis for the causes alleged by the defendant."

The acts alleged in the Berger case were that plaintiff made certain false representations to the defendant and thereby obtained her signature to a binder agreement whereby she became liable to sell her property to a third party, and that plaintiff at various times attempted to induce the defendant to violate the terms of an exclusive agency and also alleged actions of plaintiff and another in furtherance of a conspiracy to obtain money from the defendant and that these actions were calculated to and were done for the purpose of harassing, annoying, confusing and instilling fear in the defendant in order that she would pay additional sums over and above the commission agreed upon.

Rheumatic Fever

In temperate climates Rheumatic fever is a deadly disease, especially in youth. Rheumatism in general is most prevalent and disabling in Britain but Rheumatic fever comes under a different category. Its clinical features bear a strong resemblance to those seen in diseases of undoubted microbic origin and in septicemia owing to streptococci and staphylococci in particular.

In his book, *"The Background of Infectious Diseases in Man"* Dr. F. M. Burnet, professor of Experimental Medicine, University of Melbourne, states that rheumatic fever is quite obviously a disease of complex etiology, but there is reasonably conclusive evidence that it is essentially a result of streptococcal infection of the tonsillar-pharyngeal region; that it is disease associated with poverty and bad housing; that it is characteristic of cold temperate climates and is practically unknown in the tropics; that there is an important hereditary influence in determining the occurrence of rheumatic manifestations.

In 1945 Dr. John Parkinson in his Harveian oration in British characterized rheumatic fever as the most deadly enemy of youth and called for a campaign against it. Last year the English Royal College of Physicians organized a committee to consider the prevention and management of rheumatic heart diseases. This committee, under the chairmanship of Lord Moran, recently issued its report, the main feature of which was that doctors are urged to notify cases at an early date before the heart has become seriously affected.

There are said to be between 14,000 and 24,000 deaths from rheumatic fever each year in England and Wales, but, as Dr. Parkinson has pointed out, until the disease has been made notifiable, no more than a hazy idea of its prevalence is possible. In the *Lancet* on May 3 last a review was published from the interim report presented to the College of Physicians on April 24 by the Rheumatic Fever Committee. It stated that compulsory notification is essential to any effort to deal with the situation on a national scale as it should not only reveal the extent of the trouble but give the opportunity to deal with it at the earliest stage. The aim is higher than the care of children handicapped by heart disease, it is the prevention of rheumatic fever. The committee's report describes minutely the disease, its stages when diagnosed and treatment during convalescence.

Failing exact knowledge of the essential cause or causes of rheumatic fever no effective mode of treatment can be devised or suggested at present. If and when compulsory notification comes into force in Britain no doubt more will be found out regarding the disease from most aspects and it is to be hoped that means for prevention as adequate as possible may be formulated. At present, better housing, better standards of nutrition and health education are among the first essentials. Chemoprophylactic methods may prove useful. Until more is known of the disease than now chief reliance must be placed on preventive measures such as raising standards of living with increased attention to cleanliness, good housing, domestic and respiratory hygiene.

Genius At Discount

In these so called matter of fact days genius is not only scarce but discouraged. All men being equal a genius is out of the running in the race to make money. In the *Sunday Times* (London) March 16, there is an article, on The Exceptional Boy which says, in part, that the exceptionally clever boy runs the risk of being *ipso facto* suspect. It is as if his unusual powers were merely a species of low cunning that must be frowned upon, and any hallmark of superiority over his fellows, gained by his achievements in competitive examinations, be discredited, by removing the competitive elements or better still abolishing them altogether.

The writer of the *Times* article appears to have missed the point in titling his article. It is not necessary to be a genius in order to be suspect. Today even the very clever boy is eyed askance by his schoolmates.

The genius is, and always will be, a being apart. As a rule if he goes to school he does not distinguish himself. Not infrequently he is regarded as dull, eccentric, aloof and egoistical. Yet, the true genius possesses the gift of intuition and is original. He can see into things where the ordinary individual is blind. He is not so much farseeing as inseeing. Perhaps materially he is not always as useful in the world as the practical clever person but the wonderful deeds due to the genius have changed the world, though not always, perhaps, for good. Owing to the genius progress has been made as well as retrogression.

But, perhaps even more than the genius it is the practical, clever man who is disliked by the workers now, as the gospel of equality is believed in by the many of mediocre brains. To take an analogy from medicine it is as if some small provincial hospital should refuse to call in an outside specialist lest its prestige should suffer. In such a case the patient would be sacrificed, "for the good of the hospital". It is the welfare of the individual that is indeed in danger. The clever schoolboy's life work as well as that of the genius is jeopardized from the start. The writer ends his article with these words: "Truly, never was there a time when brains were so much despised or when they were more needed".

The article from which we have taken the above quotation applies to most civilized countries, perhaps most strongly to the prevailing attitude of workers in Britain. By destroying individualism, incentive to progress is also destroyed or weakened greatly. Incentive to make headway is an asset to every country and individualism is requisite for incentive.

News Items

Current Scientific Reports.—The Office of the Publication Board, now the Office of Technical Services in the Department of Commerce, was created by executive order as a clearinghouse for research reports previously withheld from general distribution for military reasons. Complete lists of these reports are contained in the *Bibliography of Scientific and Industrial Reports* published weekly by the Department of Commerce.

The original copies of all reports pertaining to medicine have been deposited with the Army Medical Library for photoduplication servicing. The February 28th issue of the *Current List of Medical Literature* contains a list of the reports received at the library up to February 1, 1947, with index. The list will be brought up-to-date from time to time in subsequent issues.

The reports will not be loaned, but may be ordered on microfilm or in photostat at the prices stated. Copies of the issue of the *Current List of Medical Literature* containing the list of these reports may be had on request to the Army Medical Library.

Obstetrics Congress.—The Third American Congress on Obstetrics and Gynecology to be held September 8-12 in St. Louis, Missouri, will include an extensive program on problems of obstetrical care as they relate to the nurse and other public health personnel.

Topics scheduled for discussion include: Structure Study as It Relates to Maternity Nursing, Present and Future Problems of the Obstetric Nursing Service, and A Nursing Education Program in Obstetrics and Gynecology. Hospital Nursing Consultants will be the subject of a round table discussion. At the morning sessions of the Congress, nurses and other public health personnel will meet with physicians, medical educators, and hospital administrators.

Army Medical Museum Exhibit.—The Exhibit Section of the Army Medical Museum has recently been expanded and is now open to the public in its new quarters on Independence Avenue, between 8th and 9th Streets, S. W., Washington, D. C. This has been made necessary because of the acquisition of much new material. Exhibits on various diseases, comparative anatomy, and embryology are on display, in addition to historical collections of coins, stamps, and medical instruments.

Current medical topics of interest are in preparation and will be opened to the public from time to time. These will include a large section on tropical diseases, collections of weapons, and moulages depicting military injuries. Special sections containing exhibits relating to veterinary medicine and dentistry and other specialized phases of medicine are of particular interest.

World Health Organization Fellowships.—A Yugoslav doctor and a public health staff member from Greece are the first candidates of the newly instituted World Health Organization Interim Commission fellowship programme to begin their studies.

Dr. Pavle Tomasic, head of the Department of Bacteriology, University of Zagreb, Yugoslavia, will study special aspects of bacterial culture at the University of Zurich.

Harry Stephopoulo, associated with the School of Tropical Medicine and Hygiene and the Greek Ministry of Health, will study hospital administration methods on a six-month travelling fellowship. He will spend three months in England, France, Denmark, and Switzerland and three months in the United States.

These candidates are the first of 200 who will study in various countries of the world under the fellowship programme of WHO. IC.

WHO Technical Publications.—According to an announcement just issued by the Secretariat of the World Health Organization Interim Commission, six technical publications in the medical and public health fields will soon be issued.

The publications, available in the United States, Canada, and Latin America through Columbia University Press, International Documents Service, 2960 Broadway, New York, are: Bulletin of the World Health Organization; Digest of Health Legislation; Chronicle of the World Health Organization; Weekly Epidemiological Record; Epidemiological and Vital Statistics Report; and official Records of the World Health Organization.

World Health Organization Expert Committees.—Three expert committees of the World Health Organization Interim Commission have held meetings recently in various parts of the world.

The first meeting was held in Ottawa, Canada, 10-21 March, when the International Committee for the Preparation of the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death convened. Detailed recommendations were made for consideration by the Sixth Decennial Conference, which is scheduled to meet in Paris, March 1948.

The Expert Sub-Committee for the Revision of the Pilgrimage Clauses of the International Sanitary Conventions met in Alexandria, Egypt, 16 April, and made an eight-day field inspection of the Suez area, El Tor, Jidda, and other points. This committee is formulating recommendations on revision of sanitary convention clauses governing health aspects of pilgrimages.

The Expert Committee on Malaria convened in Geneva, Switzerland, 21 April for five days. Recommendations of that Committee will be made to the WHO. IC and will be considered by its Committee on Epidemiology and Quarantine, when it meets in the fourth session in Geneva on 30 August.

American College of Surgeons Clinical Congress.—The thirty-third annual Clinical Congress of the American College of Surgeons, including the twenty-sixth annual Hospital Standardization Conference, will be held at The Waldorf-Astoria, New York, from September 8 to 12. The five-day program features operative and nonoperative clinics in thirty-eight hospitals in New York and Brooklyn, and scientific sessions in general surgery and the surgical specialties, official meetings, hospital conferences, medical motion pictures, and educational and technical exhibits, at the headquarters hotel. Dr. Howard A. Patterson of New York is Chairman of the Committee on Arrangements; Dr. Frank Glenn is Secretary. Dr. Malcolm T. MacEachern and Dr. Bowman C. Crowell, Chicago, the Associate Directors, are in general charge.

Those interested in attending the Congress can secure full information from L. G. Jackson, American College of Surgeons, 40 East Erie Street, Chicago 11, Ill.

Virginia Cancer Foundation.—It was recently announced that Dr. Julian I. Gilliam, recipient of the first in a series of fellowships. to be awarded by the Virginia Cancer Foundation to provide medical care for Virginians suffering from cancer, has begun a year of training in cancer work at Bellevue Hospital under supervision of New York University College of Medicine doctors.

The young Negro physician, who will return to Virginia to enter a proposed state-wide cancer center in Roanoke for the benefit of Negroes, is receiving the training as a post-graduate student at New York University College of Medicine. The Virginia fellowships are open to both white and colored doctors.

Dr. Gilliam is specializing in diagnosis of cancer and treatment of the disease by radium and x rays (radiation therapy). He is the fourth Negro doctor to be trained at Bellevue by New York University College of Medicine for work among Negroes afflicted with cancer. The College of Medicine has remitted the fees usually charged for a year of post-graduate study. Other Negro radiation therapy specialists trained at Bellevue by the College are presently doing work in Harlem, Chicago and Tennessee.

Working with Dr. Gilliam as fellow trainees of New York University College of Medicine are fifteen Army and Navy veterans, some of them being paid by the City of New York, some by the government under the G. I. Bill of Rights and some by the National Cancer Institute. All the trainees are doctors. One of them, financing himself, came to New York University and Bellevue from South Africa and will return there to practice among the cancer sufferers in his country.

Dr. Gilliam earned the right to the cancer fellowship he holds through undergraduate education at Hampton Institute and Lincoln University and graduate medical education at Howard University. He served his internship and assistant residency at Provident Hospital in Baltimore.

International Congress of Pediatricians.—Child specialists from fifty countries assembled at the Fifth International Congress of Pediatricians at the Waldorf Astoria, New York City, July 14 to 17, to share medical knowledge that should help preserve humanity. This year marked the first meeting of the Congress in America. Previous meetings were held in Paris, Stockholm, London and Rome.

Fourteen hundred delegates from Canada and the United States, 450 from Latin America, 250 from Europe, and 100 from other continents were expected. The Congress was sponsored officially by the Pediatric Section of the American Medical Association, The American Academy of Pediatrics, The American Pediatric Society, and the Society for Pediatric Research. It stressed the One World theme in all its activities, recognizing that world health is an important factor in world cooperation.

Study of Venereal Disease Inaugurated — In connection with the international study of venereal disease, the Interim Commission of the World Health Commission has appointed Dr. Thorstein Guthe, former assistant to the surgeon general of public health of Norway, to the Secretariat as a specialist in V. D.

Dr. Guthe has recently completed a year's study at the Johns Hopkins University School of Hygiene and Public Health as a fellow in public health of the Rockefeller Foundation. He is a graduate of the University of Oslo, has studied in London, Paris, and at the Mayo Clinic, Rochester, Minnesota. During the war Dr. Guthe served in the Royal Norwegian Air Force and was subsequently appointed as medical officer in charge of the Norwegian Public Health Service Clinic in New York City.

Biological Standardization Committee.—Medical experts of seven countries participated in the first meeting of the Expert Committee on Biological Standardization, which convened at Geneva June 9. Dr. W. A. Timmerman, director of the National Institute of Health, Utrecht, Netherlands, served as chairman of the Committee, whose members include: Professor E. Grasset, Director of the Institute of Hygiene, Geneva, Switzerland; Dr. A. A. Miles, Director of Biological Standards, National Institute for Medical Research, Hampstead, London, United Kingdom; Dr. J. Orskov, Director, State Serum Institute, Copenhagen, Denmark; Lieut. Col. Sir Sahib Singh Sokhey, Director Haffkine Institute, Bombay, India; Dr. W. A. Timmerman, Director, National Institute of Public Health, Utrecht, Netherlands; Dr. Jacques Trefouel, Director, Pasteur Institute, Paris, France, and Dr. M. V. Veldee, Chief of the Biologics Control Laboratory, National Institute of Health, Bethesda, Md., U. S. A.

The Committee will seek to assure more effective treatment of disease through the use of drugs, serums, and vaccines of tested and uniform value.

Wayne County's Cancer Program.—According to *Health News,* 24:16, 1947, the recently organized Wayne County Branch of the New York State Division of the American Cancer Society has charted, in collaboration with the County Medical Society, a comprehensive plan for the early detection and treatment of cancer. Wayne is the first county in the State to adopt this form of organization for the purpose of advancing cancer control.

According to press reports, Dr. George W. Pasco, chairman of the Cancer Committee of the Wayne County Medical Society, presented the plan which is directed toward the objective of a complete physical examination for every person in the county—a proposal which was later endorsed by the County Medical Society. All projects undertaken by the new group will be subject to the approval and cooperation of the Society.

Officers of the Wayne County Branch are: Dr. George W. Pasco, Wolcott, chairman; Mrs. William Noonan, Newark, vice-chairman; Mrs. Lawrence DeBack, Wolcott, secretary; and Saxon B. Gavitt, Lyons, treasurer.

A. M. A. Commemorative.—The Post Office Department has paid special honor to the Doctors of America, by issuing a postage stamp commemorating the 100th anniversary of the founding of the American Medical Association.

American Board of Obstetrics and Gynecology.—The annual meeting of the Board was held in Pittsburgh, Pennsylvania, from June 1 to June 7, 1947, at which time two hundred and fifty candidates were certified.

A number of changes in Board regulations and requirements were put into effect. Among these is the new ruling that the Board does not subscribe to any hospital or medical school rule that certification is to be required for medical appointments in ranks lower than chief or senior staff of hospitals, or associate professorship in Schools of Medicine, for the obvious reason that such appointments constitute desirable specialist training. At this meeting the Board also ruled that credit for graduate courses in the basic sciences which involve laboratory and didactic teaching rather than clinical experience or opportunities will be given credit for the time spent up to a maximum period of not more than six months regardless of the duration of the course.

The next written examination (Part I) for all candidates will be held in various cities of the United States and Canada on Friday, February 6, 1948, at 2:00 P. M.

Applications are now being received for the 1948 examinations. Closing date for these applications will be November 1, 1947.

Further information and application blanks may be obtained by writing to Paul Titus, M. D., Secretary, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

Physicians Art Association.—Dr. Anthony Bassler, New York City, received first prize for his *River Styx,* a painting in oils, at the Atlantic City meeting of the American Physicians Art Association. He also won first prize in humorous poems and permanent possession of the Secretary's cup at the Physician's Literary Guild.

Some 40,000 people visited the recent exhibition. Hangings were double that of the 1946 showing. In the future these will be limited to 500. A movement is now afoot to screen the best items exhibited and send them through the country as examples of what physicians can do as artists.

Neurosurgery.—Veterans in need of surgery of the nervous system are now sent to forty-one specially equipped and staffed hospital centers operated by Veterans Administration or under contract to it. The Veterans Administration is operating thirty-seven centers in its own hospitals.

Eligible veterans also may be treated in Navy hospitals at Philadelphia, Pa., and Houston, Texas, in the Army's Fitzsimmons General Hospital, Denver, Colo., or in the Maine General Hospital at Portland, Me.

Although many other Army, Navy and civilian hospitals are equipped to perform neurosurgery, only these four are under contract to the Veterans Administration to treat veterans.

Each center has the special equipment, neurosurgeons and other skilled personnel necessary to perform all types of neurosurgical operations, including pre-frontal leukotomies. The latter operation, involving surgery on the frontal lobe of the brain, usually is not performed in the average general medical hospital.

Jane Coffin Childs Memorial Fund.—The tenth anniversary of the Jane Coffin Childs Memorial Fund for Medical Research was recently observed at a dinner at the New Haven Lawn Club. Since cancer research is the prime concern of the Fund, the guests were from national, state, and private organizations in the cancer field.

The organizations represented included the U. S. Public Health Service, the National Cancer Institute, the Donner Foundation, the Anna Fuller Fund, the American Cancer Society, the Committee on Growth of the National Research Council, the Connecticut State Cancer Society, and Yale University.

The Jane Coffin Childs Memorial Fund was established on June 11, 1937, by gifts in trust to Yale University from the late Starling W. Childs and Miss Alice S. Coffin, of New York City. The original valuation of the Fund was approximately $3,300,000. Its present approximate appraised valuation is $4,900,000.

The Fund is distinctive in that its investments and distribution are controlled by a self-perpetuating board of managers who act upon the advice of a board of scientific advisers in making grants for research.

Army Medical Library Translation Services Discontinued.—According to the *Army Medical Library News,* the Translating Section in the Office of the Librarian and all public translation functions of the library was discontinued as of May 1, 1947.

During the war, under the supervision of Mrs. Regina Plavsky, this section rendered invaluable services to the library, the medical department and the medical profession. Demands for translations have lessened and the section can no longer be maintained as a separate unit. The personnel of the section will be detailed to the Index-Catalogue Division.

Gorgas Award Winner.— Dr. Paul R. Hawley, chief medical director of Veterans Administration who was officer-in-charge of all medical care in the European Theater of Operations during World War II, has been awarded the Gorgas Award for 1947.

The award is given annually by the executive council of the Association of Military Surgeons to some person who has made a notable contribution in the field of military medicine. It is sponsored by Wyeth, Inc., of Philadelphia. Pa.

The presentation will be made at the association's annual meeting in Boston, Mass., Nov. 13-15.

Postgraduate Course in Pediatrics.—The University of Illinois College of Medicine has initiated a one year postgraduate course in pediatrics. The course is under the general direction of Dr. Henry G. Poncher, head of the department. This postgraduate course is one phase of a program fostered by the Chicago Pediatric Society.

A complete postwar program in postgraduate pediatric training was planned in 1945 by representatives of the Children's Memorial and Michael Reese Hospitals, the children's division of Cook County Hospital, the medical schools of Northwestern and Loyola Universities and the Universities of Chicago and Illinois. Under the cooperative plan, four-week refresher courses in pediatrics will be offered at the Sarah Morris Children's Hospital and Michael Reese Hospital in the spring, at Children's Memorial Hospital in the fall and the children's division of Cook County Hospital in the winter.

The one-year course at the University of Illinois was established for pediatricians who want more than a four weeks' refresher training course, particularly those who seek to qualify for certification by the American Board of Pediatrics. The first course began on October 1st. Graduate work leading to an advanced degree was set up at both the University of Chicago and the University of Illinois. At the latter institution, no physicians have been enrolled to date, but applications are being received for three graduate fellowships. These students will be given two years of intensive specialized training.

Personal—*Dr. Melville Sahyun,* vice-president in charge of research, Frederick Stearns & Co. Division, Sterling Drug Inc., is editor of a new book entitled, *Proteins and Amino Acids In Nutrition,* soon to be published by the Reinhold Publishing Corporation, New York. At the same time, Dr. Sahyun is revising his *Outline of Amino Acids and Proteins,* published by the same firm three years ago. In addition to Dr. Sahyun, fifteen scientists have contributed chapters for the new book which will also contain a complete abstract and tables from findings of the Department of Agriculture on the *Proximate Composition of Foods.*

Assistant Surgeon General Herman E. Hilleboe, associate chief of the Bureau of State Services of the United States Public Health Service, has been appointed Commissioner of the Department of Health of the State of New York, by Governor Dewey. Dr. Hilleboe succeeds *Dr. Edward S. Godfrey, Jr.,* who retired recently.

Dr. Earl A. Martin, a specialist in internal medicine, has been named as an associate member of the Board of Veterans' Appeals. Dr. Martin has been with Veterans Administration and its predecessor agencies since 1921.

Vice Admiral Ross T. McIntire, wartime Surgeon General of the U. S. Navy, and formerly White House physician, has been named director of the new National Blood Program of the American Red Cross. The appointment was recently announced by Basil O'Connor, the organization's president.

Dr. Carl A. Harris has been named assistant director of the Medical Division of Bristol-Myers and Subsidiary Companies, New York.

Dr. Leonard A. Scheele, formerly assistant chief of the National Cancer Institute, has been appointed chief of the institute to succeed *Dr. R. R. Spencer,* recently resigned.

Dr. Claude W. Munger, New York, N. Y. was recently appointed a member of the hospital advisory committee of Associated Hospital Service —New York's Blue Cross Plan—at the regular monthly meeting of the board of directors. Dr. Munger is director of St. Lukes Hospital and professor of hospital administration at Columbia University.

Dr. A. C. Ivy, vice president of the University of Illinois, has been appointed executive director of the National Cancer Advisory Council succeeding *Dr. George M. Smith,* professor emeritus of Yale University.

Dr. Dallas B. Phemister, Thomas D. Jones professor and chairman of the department of surgery, who has been succeeded as chairman of the department by *Dr. Lester R. Dragstedt,* professor of surgery, will continue to work at the university as Thomas D. Jones professor emeritus.

Dr. William C. Menninger, chief Consultant in neuropsychiatry to the Secretary of War, and Secretary of the Menninger Foundation, Topeka, Kansas, has been made president-elect of the American Psychiatric Association.

The appointment of *Prof. C. N. Hugh Long* as Dean of the Yale School of Medicine to succeed *Dean Francis G. Blake* has been announced by *President Charles Seymour.*

Dr. George Marshall Lyon of Huntington, W. Va., has been appointed to the staff of the Veterans Administration Department of Medicine and Surgery and will develop laboratories for the use of radio-active isotopes in the treatment of veteran-patients in VA's 123 hospitals.

Dr. Louis G. Welt, clinical instructor of Medicine at Yale Medical School since July, 1946, and practitioner of internal medicine at Willimantic, Conn., has been appointed to the staff of the Veterans Administration Department of Medicine and Surgery and will engage in research projects for the Research and Education Service of VA's Department of Medicine and Surgery.

Dr. Henry Pleasants, Jr., Philadelphia, Pa., is the author of a new book entitled *A Doctor in the House,* published by J. B. Lippincott Company.

Colonel William Donald Graham, M. C., USA, deputy chief of Hospital Division, Office of The Surgeon General, was recently awarded the Legion of Merit for performing exceptionally meritorious services as Commanding Officer of the 158th General Hospital in England from November 1944 to July 1945. *Major General Norman T. Kirk,* former Surgeon General presented the award.

Dr. Stanhope Bayne-Jones, consultant to the Secretary of War and professor of bacteriology of the Yale University School of Medicine, has been appointed the first president of the Joint Administrative Board of the New York Hospital —Cornell Medical Center.

Colonel James C. Kimbrough, chief of the Urological Section, Surgical Service, Walter Reed General Hospital, was recently appointed Consultant in Urology to the Surgeon General, U.S. Army, for liasion between the army and the American Board of Urology.

Dr. J. Mark Hiebert has been appointed vice-president, to the executive management of Sterling Drug Inc., assisting the president in the operation of the business.

Brigadier General Guy B. Denit, USA, deputy for plans, Office of The Surgeon General, has received the honorary degree of Doctor of Science from the Medical College of Virginia.

Colonel Edgar Erskine Hume, M. C., now assigned to the Civil Affairs Division of the War Department General Staff, was recently awarded the United States of America Typhus Commission Medal for his meritorious service in connection with the epidemic of typhus fever in Naples in 1943 and 1944.

Dr. R. R. Sayers, medical director, U. S. Public Health Service, and director of U. S. Bureau of Mines since 1940, has been granted leave without pay to accept the chairmanship of the medical board established last week by the Trustees of the Welfare and Retirement Fund of the United Mine Workers of America.

LETTER FROM BRITAIN

(From Our Own Correspondent)

British Ministry of Health's Report on Nutrition

The British Ministry of Health's Report on nutrition from October 1946 to January 1947 (*Monthly Bulletin of Health,* March 1947, E. W. Adcock, H. E. Magee and E. H. M. Milligan, page 54) states that 4,658 persons were examined. The proportion of these with nutrition classified as good was 92.9 percent, the proportion as fair 6 percent and as poor 0.5 percent. Among school children the percentage classified as good nutritionally was 90.9.

Fourth International Congress on Microbiology

The International Association of Microbiologists is organizing the Fourth International Congress on Microbiology to be held in Copenhagen during July 20-26, 1947. General meetings will be addressed by Dr. F. C. Bawden (Rothamstead Experimental Station) on viruses. Prof. S. A. Waksman (New Jersey State Agricultural Station) on antibiotics and life, Prof. C. H. Workman (Iowa State College) on the assimilation of carbon dioxide and Prof. O. Winge (University of Copenhagen) on yeast in modern genetics. The nine sections of the Congress will be respectively devoted to general microbiology, medical and veterinary bacteriology, viruses and virus diseases, zoology, immunology, variation and mutation in microörganisms, plant pathology and food mycology, soil and water microbiology, dairy and water microbiology and industrial microbiology. President of Congress will be Dr. Th. Masden, honorary general secretary Dr. M. Bjernehoe, Kommune Hospital at Copenhagen.

St. John of Jerusalem Nursing Officers Meet in Norwich

A conference of officers of nursing divisions of the St. John Ambulance Brigade in Norfolk, England was held on April 26 at the Samson and Hercules House, Norwich. Dr. May Rutledge, superintendent of the St. John Ambulance Brigade in Norfolk, presided over a gathering representative of all Norwich and Norfolk county divisions.

A problem facing all parts of Britain is the increasing number of old and elderly people. These are out of proportion to the population and although in a sense it is not a medical problem, it is one which ultimately affects the medical profession. In Norfolk, for example, a large agricultural county limited in population, there are numerous old persons living alone. There appears to be no regular method of caring for these aged, except by the district nurses in cases of sickness and by relatives, friends and neighbors. The Red Cross also helps. Many old persons are in-patients of the Norfolk and Norwich Hospital but, as is the case with most provincial hospitals in Britain, it lacks a full supply of competent nurses. In any event, old persons cannot stay in hospitals, as the beds are required for acute and accident cases. It is indeed a question which must be grappled with energetically and soon. The situation in Norfolk, in regard to old people who are poor and alone, is similarly accentuated in many parts of England and especially in big manufacturing centers.

Dean of Norwich on the Voluntary Hospital System

It seems that the voluntary system of maintaining and manning hospitals in England and Wales will be soon a thing of the past. With the present government, it is a case of "new brooms sweep clean". The new Dean of Norwich, presiding over the quarterly meeting of the Board of Governors of Norfolk and Norwich Hospital, recently said in part that he hoped that this hospital with 400 beds or so would not increase its number of beds. During the ten years in which he was Bishop of Wellington, New Zealand, the number of beds there grew from 600 to 1,000. He preferred that a greater number of beds should be made available in auxillary hospitals. A hospital of more than 500 beds tended to become too mechanical, with heads sitting at desks and pressing buttons and losing contact with what was happening.

Royal Medical Benevolent Fund

Messrs. Borroughs Welcome and Co. have handed over to the Royal Medical Benevolent Fund all proceeds from the sale of their medical diary for 1946. This gift, amounting to £650 ($2,600) will provide extra comforts for the fund's beneficiaries.

Charing Cross Hospital, London

Charing Cross Hospital was damaged by a bomb in the First World War and since 1911 its students have attended King's College Hospital in the Strand, London for their anatomy and physiology courses. It is hoped that by next October the repairs to Charing Cross Hospital will be completed and the medical school will reopen its preclinical department, which will enable the hospital to take forty-five additional students each year. The preclinical school will be open to women and men and at the same time opportunity is being taken to admit women to the clinical course. The vacancies for men for the coming session have been filled already but applications from women may now be submitted.

Readership in Genetics at University College, London

Dr. H. Gruneberg has been appointed to the University readership in genetics tenable at the University College, London, as from October 1, 1946. Dr. Gruneberg was demonstrator in anatomy in the University of Frieburg from 1932 to 1933. From 1933 to 1936, he was research student and since 1936 honorary research student at University College. Since 1938 he has held the Moseley research student-ship of the Royal Society.

Nuffield Rheumatism Fellowship

The Nuffield Foundation, to advance the knowledge and treatment of those diseases and complaints lumped under the name of rheumatism, is prepared to receive applications for fellowships founded for this purpose from medical men and women who wish to obtain advanced training to enable them to specialise "in the diagnosis, treatment and study of chronic rheumatism". The annual value of a fellowship will be between £500 ($2,000) and £800 ($3,200) with an additional grant for travelling expenses abroad when necessary. Candidates should have spent at last one year since qualification in the general medical practise of a hospital and should preferably hold the M.K.C.P. Service officers may apply for fellowships to be tenable on their release from the Forces.

Appointments in Leeds University

The following appointments have been made in the University of Leeds: Dr. Philip George as Brotherton research lecturer in physical chemistry and Dr. G. E. Pringle as lecturer in inorganic and physical chemistry.

Color Blindness

According to *London Lancet,* April 5, 1947, page 455, color blindness is not uncommon, being found in veinous forms in about 5 percent of mates. Usually, like hemophilia, it is inherited from the mother by male children. It is rare in the female, occuring only in children born of a color blind father and a mother who is a carrier. There are all degrees of disability, the most usual being difficulty in distinguishing between red, green and yellow.

General Board of Control for Scotland

Dr. Laura Mill has been appointed a medical commissioner of the above Board in place of Dr. Kale Fraser who has retired. Dr. Mill has been in the service of the board as a deputy commissioner since 1936

Epsom College Scholarships for Girls

The council of Epsom College, founded chiefly in part for the benefit of children of medical men who have not been successful in practise or who are unable to afford the cost of an ordinary public school education, will shortly award St. Ann's scholarships to girls attending Church of England schools. Candidates must be fully nine and under sixteen years of age and must be orphan daughters of medical men who have been in independent practise in England and Wales for not less than five years. The value of each scholarship is dependent upon the means of the applicant and the locality and fees of the school selected. Pensions are also available from the fund of the Epsom Medical Foundation for impecunious medical men or their widows, and foundation scholarships, providing education, clothing and maintenance free of cost for the sons of necessitous medical practitioners.

New Fellows of the Royal Society

Dorothy Crowfoot Hodglein, fellow and tutor of Somerville College, Oxford, and University demonstrator in chemical crystallography, distinguished for a long series of investigations by x ray crystal analysis into the structure of the sterop protein and other complex organic molecules.

Mary Lucy Cartwright, fellow of Girton College and lecturer in mathematics in the University of Cambridge, distinguished for her researches in the theory of functions of a complex variable.

J. Craige, member of the scientific staff of the Imperial Cancer Research Fund, London, distinguished for his work in bacteriology and immunology and especially for his studies of viruses.

Dr. G. M. Bennet, Government chemist, distinguished for his work in organic chemistry on the reactivity and configuration of organic molecules.

Prof. M. G. Evans, professor of physical chemistry and head of the Department of Chemistry, University of Leeds, distinguished for his contribution to chemical kinetics and especially for his theoretical work on the modern concepts of reaction velocities.

Prof. G. Jefferson, professor of neurosurgery in the University of Manchester, distinguished for the foremost part he has played in the surgery of the brain and spinal cord in the treatment of head injuries, and for his studies of the physiological disorders resulting from brain injury.

Muriel Robertson, head of the Department of Protozoology of the Lister Institute, London, distinguished for researches on the life cycles of protozoa and on immunology.

Prof. H. A. Krebs, professor of biochemistry, University of Sheffield, distinguished for his work on intermediary reactions in cell metabolism.

Congenital edema of the legs is known as *Milroy's disease,* after Professor William F. Milroy, of Omaha, Nebraska.

* * *

Granuloma fungoides is known as *Auspitz's disease* for Heinrich Auspitz, who was a pupil of Brücke, Rokitansky, Skoda, Appalzer and Hebra. The disease was described in 1806 by Alibert, and is also known as *Alibert's disease.* Kaposi described the same disease as syphilis vegetans. Auspitz studied the pathology of the skin, applied the term of parakeratosis, named acanthoma, and contributed to the formation of vesicles and bullae of pemphigus. Auspitz described the bleeding points disclosed by removing the scale in psoriasis, which is known as *Auspitz's sign.*

* * *

Hydrocystoma, or *Robinson's Disease,* was described by Andrew Rose Robinson, a dermatologist practicing in New York City. The disease was described in Robinson's manual of Dermatology, 1884.

Book Reviews

Ophthalmology

Diagnostic Examination of the Eye. Step-by-step Procedure. By CONRAD BERENS, M. D., professor of clinical ophthalmology, Columbia University; executive eye surgeon, New York Eye and Ear Infirmary; and JOSHUA ZUCKERMAN, M. D., instructor in ophthalmology, New York University. With 410 illustrations, including 48 in color on 13 plates. Philadelphia, London and Montreal: J. B. Lippincott, 1946. Pp. xxi + 711. Price $15.00.

Most textbooks, dealing with the eye say the authors, are so replete with anatomy, physiology, embryology and collateral sciences that there is a likelihood of practical, clinical ophthalmology being pushed aside or limited. The thought here is to recommend a systematic, methodic procedure in examining the eyes, so comprehensive that no detail shall be overlooked. Part I describes the examination during the first visit of the patient to the oculist. It relates thirteen steps, the first of which is "general and special interrogation", and the last "tonometry". In between are tests for motor function, confrontation fields, use of the standard slit lamp, retinoscopy and refraction, transillumination and contact illumination,—to name just a few of the thirteen . . . Part II (seven steps) embraces examination during the second or final visit and this has to do with color vision, fusion sense and depth perception, light sense, perimetry and campimetry, and a general summary of the findings. Part III may require a third visit to determine supplementary information suggested by results of the previous sittings, such as a history of some general disease, hereditary syndromes, neurologic data etc., in fact, anything which may help in making an effort to afford relief to the patient beyond the mere matter of "glasses".

There are charts for the setting down of every kind of fact and test, even as to teeth, pharynx and larynx, to say nothing of the various "systems" (circulatory etc.) of the body . . . If one carefully follows the plan of action outlined here it is hard to see how anything can be neglected or passed by. One may predict that it will be "standard" for many years to come.

Radioactivity

Radioactivity and Nuclear Physics. By JAMES M. CORK, professor of physics, University of Michigan. Illustrated. Ann Arbor, Mich.: J. W. Edwards, Publisher, 1946. Pp. x + 175. Price $3.50.

The subject of radioactivity is at present receiving very much attention. There is a vast quantity of essentially valid information relative to the natural radioactive bodies, which was accumulated prior to the discovery of induced radioactivity. This material has been presented by Rutherford, Chadwick, and Ellis. The author has drawn freely upon this as well as upon the original papers, and many of the published texts of Rasetti, Feather, M. Curie, Pollard and Davidson, Gamow, Heitler, Hevesy and Paneth, and Smyth, which deal with the various aspects of his subject, as sources of information.

The book describes natural and induced radioactivity and the apparatus for the development of the latter including the cyclotron. Alpha rays, beta rays and gamma rays are also described. This is followed by a description of the various atomic components, neutrons, protons, deuterons, etc., and their consideration leads to the discussion of cosmic radiation and nuclear fission.

It is pointed out that many new aspects of the subject have followed the discovery of 'induced' radioactivity. The scope of these, and their new practical applications, vary from the simple application of radioactive tracer elements, as a tool for related sciences, to fundamental investigations dealing with the nature of the forces acting between elementary particles as revealed by 'scattering' experiments. In therapeutic medicine fields of usefulness also exist.

All of this is well and lucidly described in the text with appropriate diagrams and drawings. The author also offers the historical development of each topic treated and lists the references in the literature. In some cases the text gives the necessary complicated mathematical presentation only to the extent the author deems desirable in a book of this type. The material presented must, therefore, be considered as a basis for a course serving advanced undergraduates and beginning graduate students, and as an aid to research workers in the subject.

At the end of each chapter is a list of problems of varying difficulty.

Hematology

Clinical Hematology. By MAXWELL M. WINTROBE, M. D., professor of medicine, University of Utah, School of Medicine, Salt Lake City, Utah. Second edition, thoroughly revised. Illustrated with 197 engravings and 14 plates, 10 in color. Philadelphia: Lea & Febiger, 1946. Pp. 862. Price $11.00.

Hematology appears to grow more complicated to the physician in spite of the fact that the subject is better understood and recent progress has tended to simplify the field as a whole. Apparently the introduction of new methods, the description of new disease syndromes and the application of new terms has contributed to the complexity of this simple subject. The author succeeded in his first edition to bring accumulated knowledge of hematology into a systemic and orderly form, to sift the significant from the inconsequential, to describe newer methods of proven value, to formulate clinical details for difficulties in diagnosis, to describe the indications for and methods of treatment and to clarify the underlying nature of physiologic disturbances based upon current concepts of blood formation.

These criteria are amply fulfilled in the new edition embodying many recent advances, especially the discovery of the chemical structure and synethesis of folic acid and the demonstration that it will produce remissions in pernicious and other macrocytic anemias. Other recent advances include the role of vitamins in blood formation, the elucidation of porphyrins through isotope techniques, the role of the Rh factor in hemolytic processes, the introduction of nitrogen mustards for the treatment

of Hodgkin's disease, the newer knowledge of the metabolism of the red cell and pertinent probings into the mechanism of blood disorders.

The author emphasizes the importance of accurate diagnosis as a prerequisite to efficacious treatment. The use of therapeutic measures without discrimination and the administration of "shotgun" antianemic remedies indicates the need for a clearer understanding of the role of iron, liver, vitamins, thyroid and other therapeutic substances in hematology. Laboratory procedures, indispensable in diagnosis, are presented so simply that they can be carried out in office practice. The nomenclature is that now accepted universally, hence no glossary of confusing terms has been appended. The illustrations in black and white bring out many fine details.

After a preliminary chapter on the origin of blood in the embryo, infant and adult, the author preceeds to a comprehensive description of the erythrocyte, leukocyte, blood platelet and blood as a whole, including the principles and technique of blood examination. The subjects are clearly evaluated in successive chapters of anemias, polycythemias, purpuras, hemorrhagic disorders, leukemias, agranulocytosis and tumors of the blood-forming organs. Every statement made gives the source of authority so that each chapter abounds in references to the world literature from historical sources to recent advances. The book is a veritable mine of clinical and experimental hematology carefully organized into an integrated whole. It not only assists in establishing an accurate diagnosis, but points the way to logical application of the various specific measures.

Nuclear Research

Electron and Nuclear Counters. Theory and Use. By Serge A. Korff, M.A., Ph.D., associate professor of physics and supervisor of physics research, College of Engineering, New York University. Second printing. Illustrated. New York: D. Van Nostrand Co., Inc., 1946. Pp. xi + 212. Price $3.00.

An atmosphere of mystery surrounds the pertinent facts regarding the theory of the discharge mechanism, and the practical operation of various types of counters. In addition, there is a lack of understanding of the special procedures for their manufacture and use, and of the reasons why particular techniques appear to be successful.

This book describes the internal mechanism of the discharge in the counter, the constructional and operational features which are desirable, and the best means of securing them. The subjects discussed include the conventional Geiger counters, as well as counters for special purposes and those selectively sensitive to particular types of particles, plus the progressive changes in counter behavior as the voltage is raised. The terminology is defined, the operation of the instrument is developed—first as an ionization chamber, then as a proportional counter, and finally as a Geiger counter. The theory and operation of each different type of counter are described, as well as the various electronic circuits, which are the essential auxiliaries to the successful operation of various kinds of counters. There are notes concerning the errors encountered in using these devices and also their corrections.

In medicine, counters have been used for the detection of minute traces of radioactive substances in biological material, either radium and its decomposition products, or artificially activated materials used in biological tracers. Such investigations include the determination of the amount of substance introduced accidently or by design, its distribution, and its progression through various biological changes throughout the body. Counters also measure x rays. They warn against overexposures in the presence of stray or scattered radiation, and ascertain the effectiveness of protective procedures.

Written on an intermediate level for users of counters, without specialized knowledge in the field of Geiger counters, the book presupposes an acquaintance with the main concepts of atomic physics, such as ionization, recombination, radiation and diffusion, as well as some familiarity with vacuum tube circuits. The information supplied should be of great use to graduate students, to the various industrial laboratories and to medical research institutions.

Otorhinolaryngology

Diseases of the Ear, Nose and Throat. Principles and Practice of Otorhinolaryngology. By Francis L. Lederer, M. D., professor and head of the department of laryngology, rhinology and otology, University of Illinois College of Medicine, Chicago, Ill. Fifth edition. Illustrated with 729 half-tone and line engravings on 473 figures with 18 full page color plates. Philadelphia: F. A. Davis Co., 1946. Pp. xii + 934. Price $10.00.

Based on World War II experience, the author endeavors to bring this new edition "up to date". In otology, he finds much new material concerning hearing aids, the relation of speech to hearing, and refers to the facts brought in by the acoustic physicist, the psychologist and the speech-correctionist, all of which he classifies under the general head of "Audiology". He wishes to discount the pessimism concerning the future of this surgical specialty because of the sulfa and penicillin drugs, on the grounds that we still have far to go in the amelioration and cure of many baffling conditions, and in studying "the newer disease entities", and the antibiotics. He quite correctly says that we have still much to learn.

This reviewer regrets the necessity of taking issue with certain errors of omission and commission. For example, anesthesia, especially local anesthesia which is coming into even wider use is very casually dealt with. One would expect, for example, in the paragraphs on antrum procedures to find a description of nerve-blocking technique, specifically, injection of the spheno-palatine region to block the superior maxilla which has been so well described in many essays and books, especially by dental and oral specialists. For example (P. 458) he describes the "technic of the sublabial antrum operation" by beginning with the incision. There is little or nothing about a "work-up", preparation of the patient, preliminary sedatives, sites of injection of local anesthetics, position of patient on table, instruments

in common use, or orientation of assistants and nurses. Moreover, in the radical (sublabial) procedure he directs that the anterior half of the inferior turbinate be dissected (removed?), and that a flap be formed which is turned down into the sinus opening and packed against the sinus floor. This technique has been previously described, but many operators have given it up since it prolongs the operation and the flap is prone to curl up and not attach itself to the antrum floor. In any case the inferior turbinate had better be left entirely alone, unless it becomes necessary to infract it toward the middle line to secure more room. Later it can be pushed back into its normal position and serve to cover the naso-antral opening.

Where general anesthesia is desirable in any operation on the nose, throat or ear, pentothal sodium given intravenously is of surprising value for many reasons. One fails to find it mentioned.

In discussing what the author calls Sluder's neuralgia of the sphenopalatine (Meckel's) ganglion, Dr. Sluder's technique of anesthetizing that ganglion either topically or by injection curiously enough is not described in spite of its well-known value in "half-headache" and other disorders. After saying that "alcohol injection is not practical (for reasons mentioned) the author states that "this treatment of major trigeminal neuralgia is advocated by some clinicians who find it of value both for the relief of pain and for positive diagnosis."

The book in format, paper, printing and illustrations is all that can be desired. It seems that more careful editing, however, will enhance the value of future editions.

Diabetes

The Treatment of Diabetes Mellitus. By Elliott P. Joslin, M. D., medical director, George F. Baker Clinic, New England Deaconess Hospital; clinical professor of medicine emeritus, Harvard Medical School; Howard F. Root, M. D., associate in medicine, Harvard Medical School; Priscilla White, M. D., physician, New England Deaconess Hospital; Alexander Marble, M. D., instructor in medicine, Harvard Medical School; and C. C. Bailey, M. D., Research Fellow in medicine, Harvard Medical School. Eighth edition, thoroughly revised. Illustrated. Philadelphia: Lea & Febiger, 1946. Pp. 861. Price $10.00.

In this, the eighth edition of the popular work on diabetes mellitus, one finds the text complete and comprehensive as one may judge by the following topics covered: The incidence of diabetes, etiology, psysiology of diabetes; alloxan diabetes, pathology and causes of death in diabetes; urine, blood, and diet in diabetes; definition, diagnosis, prognosis, treatment, complications of diabetes; a system review with the effects of diabetes on each system; various diseases which are seen concurrently with diabetes; the diabetic in relation to surgery, childhood, and pregnancy.

Various topics are covered by the above authors, who needless to say, are well-known in their field. As Joslin states, "This book records the facts which have helped my associates and me treat 29,000 diabetics over a period of forty-eight years," and as a general study of the subject it is excellent. The pages are filled with charts, tables, case histories with discussions of the cases, and the personal views of many authorities.

Interesting concepts are brought to light such as: why the incidence of diabetes is higher in married than in single women; that the Irish have not a low, but high diabetes rate; what advice to give the diabetic on marriage and their chances of transmitting the disease; why is there a relationship between diabetes and obesity?; the relation of trauma to diabetes, and many other thought provoking problems.

The most modern investigations regarding diabetes are included — the role of alloxan and its specific attraction to the pancreas causing experimental diabetes, the place of radio active isotopes, lipocaic, choline, inositol, are covered. The account of the therapy in diabetic coma and the use of insulin pre and postoperatively (as well as the type of anesthesia to use) is very well done.

Allergic conditions may, of course, be found in diabetic patients just as in the non-diabetics, however, when they develop an allergic state which is peculiar to diabetes the situation may become spectacular. Fortunately the most common allergic reaction is a local one following the injection of insulin. The most dangerous allergic reaction to insulin is anaphylactic shock. The reason for this is due to the interior arrangement of the component animo acids in the various types of insulin. This problem is more than adequately discussed in relation to types, incidence, etiology, experimental studies, and therapy.

An illuminating discussion is included on the susceptibility of the diabetic to pulmonary tuberculosis as well as the relation of cancer and syphilis of the pancreas to diabetes.

This volume is a monumental work on the subject and is required reading for those interested in internal medicine.

Pediatrics

The Complete Pediatrician. Practical, Diagnostic, Therapeutic and Preventive Pediatrics. By Wilburt C. Davison, M. D., professor of pediatrics, Duke University School of Medicine. Fifth edition. Durham, N. C.: The Duke University Press, 1946. Pp. vii + 256. Price $4.00.

This reference book emphasizes symptoms and signs in the diagnosis of disease. Physicians, when confronted with a child who has certain symptoms, cannot always obtain diagnostic help from a systematic textbook. Indeed, they often are unable to interpret the patient's disease from his signs, and consequently cannot locate the description of the correct disease. One can thus arrive at a diagnosis, instead of resorting to mechanical memorization of textbook descriptions of disease. As a rule, a student or physician notices the patient's most obvious symptoms and recalls that they occur in a certain disease. But, frequently he forgets that these same symptoms may be present in several diseases. An erroneous diagnosis often is the result.

Consequently, the author emphasizes the twofold nature of pediatrics: the recognition of normal

children and the necessity of keeping them normal, based on a knowledge of growth, development and prevention; and the recognition of sick children, their diseases and what to do for them. More children are saved by preventing disease than by treatment, but many a youngster is alive today because some physician realized that he was seriously ill and knew how to apply the correct emergency measures.

At first glance this book, with its numerous cross reference numbers, resembles a telephone book or a mail order catalogue without pictures. Indeed, it might be called a pediatric almanac. It merits the countryman's comment on reading the encyclopedia. "It is full of information but rather disconnected," or the remark of the lunatic who purchased a dictionary for light reading and complained that the author changed the subject so frequently.

The book is divided into various systems such as respiratory, gastrointestinal, neuropsychiatric, orthopedic, urologic, etc., in an attempt to correlate symptoms and signs with actual disease entities. The symptoms and signs are presented in association with the disease in which they are mostly observed. Each of the diseases are summarized from the standpoint of the clinical, and laboratory, diagnostic, preventive and therapeutic approaches. Common entities are discussed at the beginning of the chapter and the most rare diseases towards the end. Tables correlating disease entities with clinical characteristics are distributed throughout the book to simplify differential diagnosis. A unique chapter gives the common laboratory procedures in everyday pediatric practice. These are correlated in each case with clinical conditions in which they are most valuable. The chapter on nutrition gives the theory and practical developments in the field as they are applied to each age level. A table of pediatric foods and diets with chemical analysis is helpful in quantative nutritional therapy. The final chapter gives drugs and prescriptions frequently used in pediatrics.

The book is a veritable mine of useful information and is invaluable for everyday practice. One of the objections to this type of pediatric summary is overcondensation at the expense of clarity. For example, the statement that hemorrhagic disease includes at least three types of bleeding disorders is false. The complaint in all these diseases is that hemorrhage occurs in all parts of the body is equally untrue. The treatment of bleeding in general, including hemorrhagic disease of the newborn, is confusing and far from an accurate approach to the underlying cause of each type of hemorrhagic disorder. It is well established that hemorrhage is due to some defect in one of the clotting constituents of the blood. If prothrombin is diminished, the injection of any other constituent than vitamin K, the precursor of prothrombin, does not constitute rational treatment. Yet all forms of hetrogenous treatment are included without relation to specific etiology. Nevertheless, it does not defeat the main purpose of the book *i. e.* to bring to the fore accepted methods of diagnosis and treatment as constant reminders in daily practice. It is up to the reader to be selective about the particular information he is seeking.

Research

Medical Research. A Symposium. Edited by Austin Smith, M. D., secretary, Council on Pharmacy and Chemistry; director, Therapy and Research, American Medical Association. With 17 illustrations, including 10 subjects in color. Philadelphia, London and Montreal: J. B. Lippincott Co., 1946. Pp. x + 169. Price $5.00.

This book consists of a symposium by various contributors who are well known in medical research. Each contributor is allotted a chapter to expound his particular approach to the subject.

Dr. Torald Sollmann's chapter is concerned with the philosophical background and fundamentals of medical research. . . its motives, training, techniques required, supplies, and objectives. He feels that perhaps the most important quality for the scientific observer is that he must constantly appraise his observations as to correctness and applicability. He also brings up the importance of animal experimentation as opposed to the stupidity of the antivivisection movement. His article is distinguished by a revival of the old rules of Descares which are still useful.

Dr. Austin Smith's chapter is the best in the book. He relates an accurate history of the progress in therapeutics due to research. The trends and needs of modern research are covered as well as the industrial expenditures involved. Measures to expedite research are presented with a hope that misunderstandings could be avoided in the future. He has a word of caution to the clinical experimenter—the drug used must be safe to use to avoid devastating legal action by the patient. Another point of caution is that new treatments should not be unnecessarily dramatized solely to win public interest because the enthusiasm aroused raises false hopes and would ultimately hurt research.

Herbert O. Calvery, Ph.D. has written on the research laboratory—its function, organization and administration, and the buildings, equipment and supplies needed. He divides the laboratory into "units" each having a separate function so that it becomes a well-directed cooperative project in which many specially trained persons unify their efforts.

The business aspect of research is covered by S. De Witt Clough in his article on the manufacture, and the development of new drugs. The research organization of the manufacturer, the control of pharmaceutic products, the new drug application necessary before the drug may be marketed, are well done. Other topics covered are: registration in Latin-American Countries; Preparing to Market a New Drug; Selecting the Projects for Medical Research; and the Relations of the Manufacturer to Independent Research Workers.

Other contributions cover medical research in the University medical school; clinical research with a notebook, the publicizing of scientific research, and photography in medical research which are interesting back-of-the-scenes pictures of the workings of modern research. For those who have wondered about just what medical research is, who contributes, and what the contributors expect in return, this book will answer those questions.

Surgical Digest

Ligation of Inferior Vena Cava Veal *et al.*, resort to this operation whenever they are satisfied that ascending thrombosis of the lower limbs has reached beyond the inguinal ligament. They use the extra-peritoneal approach to the vein and after ligation, no further pulmonary emboli have been encountered.

Malignancy of the Papilla of Vater Discussing lesions of the ampulla of vater, Baker and Caldwell agree with Brunschwig that in suspicious cases the surgeon is justified in exploring this ampulla transduodenally. Should a small, non-fixed ampullar malignancy be present, it can safely be excised transduodenally and the ducts be re-implanted if necessary. Such a limited operation is unjustifiable, of course, if the pancreas or other adjacent structures have already become involved.

Cellophane Wrappings Around Aneurysms Harrison and Chandy used cellophane by wrapping it proximally and distally to a subclavian aneurysm, and the fibrosis induced by the cellophane caused complete occlusion of this vessel at the aneurysmal site after nineteen months. De Takats and Reynolds likewise used this material on three cases presenting aneurysms of the abdominal aorta, and with encouraging results. Further experiences will be needed but this may eventually prove to be the best therapy for such cases.

Removal of Primary Liver Tumors The fact that primary liver tumors can be excised safely was demonstrated by Duckett and Montgomery in a small series of cases. If needed, two thirds or more of the liver can be removed. Hemostasis is induced by interlocking mattress sutures and a continous suture at the edges of the resected liver. An absorbable gelatin sponge or absorbable cotton or gauze (oxidized cellulose) impregnated with thrombin solution can be left in the liver wound before final closure.

High Gastric Ulcer Colp and Druckerman feel that in the case of chronic "benign" gastric ulcers, situated high on the lesser curvature, one can resect a great portion of the stomach but leave the ulcer in situ. If sufficient removal of the stomach has been done, then a permanent achlorhydria remains and the ulcer heals completely. Such a palliative gastrectomy is similar to Finsterer's "resection par exclusion" for irremovable duodenal ulcer, but differs in that the duodenal ulcer remains benign, whereas the gastric ulcer may undergo malignant degeneration. Since this may occur only in five percent of the cases, the operation, therefore, no doubt is of distinct value in some cases.

Dressings in Protology C. Rosser finds that the gelatine sponge plus thrombin, or oxidized gauze or oxidized cotton are all equally serviceable as an hemostatic dressing for operations in the field of anorectal surgery, although he prefers the oxidized gauze for office use.

Value of Indwelling Catheter E. S. Hicks studied two thousand cases, mostly in women, requiring catheterization of the urinary bladder and has come to the conclusion that an indwelling catheter reduces the incidence of morbidity from catheterization from eighteen percent to three percent, when contrasted with the results of intermittent catheterization. Patients receiving large amounts of blood and intravenous fluids, especially, require prompt and effective emptying of the bladder. However, one must be on the alert and make sure the tubes do not kink. With proper precautions the use of a Foley or other indwelling catheter can be a great help during both the operative and postoperative periods.

Ultraviolet Radiation in Operating Rooms Some institutions are beginning to install ultraviolet equipment in their operating rooms in order that contamination of the operative wound by microorganisms in the air may be eliminated as much as possible. Roy Fraser made a special study of this problem and is of the opinion that there exists no serious contraindication to the use of ultraviolet germicidal equipment in hospitals. Providing proper precautions are used, neither the patient's tissues, the surgeons nor the operating room personnel are harmed by the proper use of this bactericidal equipment in operating rooms. Of course, the eyes of the operating team must be protected, consequently ultraviolet reflections from the walls or the draperies used at operation must be eliminated.

Local Chemotherapy of Wounds A five percent solution of sulfamylon was found to be nontoxic and highly effective in the treatment of wounds, even in the presence of blood and pus. Streptomycin also acts effectively, even in the presence of blood, whereas calcium penicillin was found to be practically worthless in treating the mixed infection usually present in contaminated wounds. A combination of streptomycin and the five percent sulfamylon solution proved very efficacious in practically all cases, even when gas-producing anaerobic bacteria are present. Chloryphyl also is helpful, since it stimulates wound healing, and is especially suitable after x ray burns, in the vagina and other cavities, etc. Chloryphyl, as is well known, stimulates the epithelial tissues as well as the connective tissues and has proven a valuable remedy in indicated cases.

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AUGUST 1947

Medicolegal Notes

Malpractise Case Held for Jury

In the death of an infant two and a half years old who had become sick several hours after eating about a dozen aspirin tablets and who had been taken to defendant's hospital where, at defendant's direction, he was given an enema and put to bed about 10 P. M. The negligence alleged was that the defendant did not see the child until 9 the next morning, when he undertook to pump out his stomach. The child died a few minutes later. In an action for damages for alleged malpractise there was a judgment of nonsuit from which the plaintiff appealed. The judgment was entered at the close of the plaintiff's evidence, and the question on appeal was whether the evidence was sufficient to carry the case to the jury. The North Carolina Supreme Court held it was and revised the judgment of nonsuit, holding out that the plaintiff's case survived the demurrer. Plaintiff's allegations: "1, that the defendant omitted to use reasonable and diligence in the practise of his art and 2, that he failed to exercise his best judgment in the treatment of the case, if supported by competent evidence, were held to require a jury finding. Plaintiff alleged that the defendant failed 1, to exercise due care in waiting more than ten hours before seeing the patient; and 2, that he omitted to exercise an enlightened judgment in pumping out his stomach without first ascertaining whether 'he could take it'." The absence of expert medical testimony disapproving the treatment or lack of it was not fatal to the plaintiff's case. Gray vs. Weinstein, 42 N. E. 2d 616.

Aggravation of Bilateral Hernia

While testing motors, an employee of a motor company slipped and fell, aggravating a preexisting nondisabling hernia. After the accident he had continuous trouble, until the hernia was surgically repaired two months after the accident occurred. The Michigan Supreme Court sustained an award of compensation from the time of this surgical operation for total disability for six weeks, with the reimbursement of medical and hospital expenses. Hargrove vs. Ford Motor Co., 313 Mich. 199, 20 N.W. 2d 864. The award was not limited by the occupational disease amendment to the Workmen's Compensation act.

Qualifications of Expert

A pedestrian, seventy years of age, was struck by an automobile while crossing a street, sustaining injuries which resulted in his death. In an action for damages against the owner of the vehicle and its driver, there was evidence of negligence on the part of the defendants and no evidence of contributory negligence on the part of the deceased. It was therefore held that damages could properly be assessed for the death according to the degree of culpability.

A physician testified as an expert medical witness as to the cause of the deceased's death. Exception was taken by the defendants as to his qualifications to testify on this question. The physician testified that he was in general practise, was not a specialist, and was the family physician of the deceased. He testified that the deceased before the collision had an arteriosclerotic heart disease and that the collision, by causing cerebral thrombosis in view of the existing heart disease caused death. He also testified that he had been in general practise for about twenty-eight years.

The Massachusetts Supreme Judicial Court, Preston vs. Cianci, 73 N. E. 2d 246, on the whole evidence, thought "that the opinion of the experienced physician, who was familiar with the deceased and his physical condition, and was his attending physician, could be received upon the question of the cause of death." and overruled the defendants' exceptions.

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Merck Fellowships

The National Research Council announced today the initial five awards under a $100,000 fund established by Merck & Co., Inc., to provide promising young scientists with further research training in the closely allied fields of chemistry and biology.

Many scientific problems are so complex that combinations of skills are needed, and the purpose is to help foster the development of scientific leaders with broad competence in the natural sciences. The selections, made by the Council's Merck Fellowship Board and announced in the magazine "Science", are: Joseph Lein, New York City, for advanced study at the California Institute of Technology on the specificity of enzymes produced by mutated and non-mutated genes in Neurospora; Nevin Stewart Scrimshaw, Rochester 7, New York, for a biochemical study at the University of Rochester of factors associated with toxic complications of pregnancy and fetal abnormalities; Lorin John Mullins, Palo Alto, California, for advanced work at the Naples (Italy) Zoological Station on the experimental modification of permeability phenomena in marine vertebrates and invertebrates; Arthur Beck Pardee, Pasadena, California, for researches at the University of Wisconsin in general physiology, histology, cytology and related fields as preparation for a career in medical research; and B. Roger Ray, South Nampa, Idaho, for work at the Rockefeller Institute for Medical Research, New York City, on the determination of movements of salts through certain nonaqueous solutions by means of high speed centrifugation, the results of which will apply to the problem of cell permeability.

These first Merck Fellowships are for the year 1947-1948. The recipients were selected from a field of forty-nine applicants. The amounts of the awards vary with the individual circumstances in each case.

In accepting administration of the fund established by Merck & Co., Inc., manufacturing chemists with plants at Rahway, N. J., Elkton, Va., and Philadelphia, Pa., the Council's chairman, Dr. D. W. Bronk, wrote company president, George W. Merck, that the fellowships would help to set a pattern for the more effective participation of American industry in the training of scientific personnel.

The Merck Fellowship Board, which was appointed by the Council, consists of the following members: Dr. A. N. Richards, University of Pennsylvania, chairman; Dr. George W. Beadle, California Institute of Technology; Dr. Hans T. Clarke, Columbia University; Dr. George O Curme, Jr., Carbide and Carbon Chemicals Corporation and Dr. Rene J. Dubos, Rockefeller Institute for Medical Research. Dr. Bronk also is a member, ex officio.

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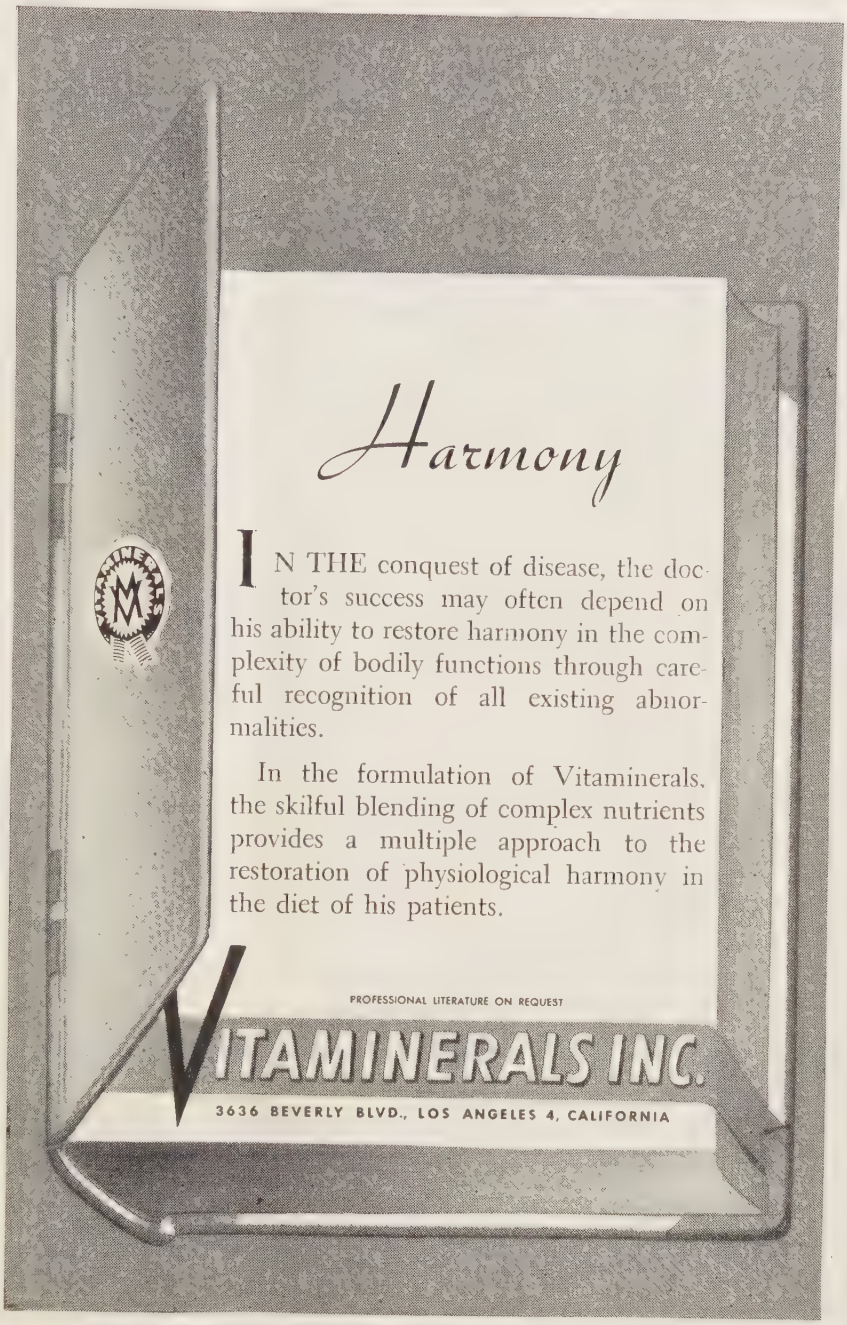
Institute of Industrial Medicine

Officials of New York University recently inaugurated the institute of Industrial and Social Medicine as a unit of its New York University-Bellevue Medical Center, and announced that Dr. Anthony J. Lanza, one of the nation's leading authorities in the field of industrial health, will join the Institute as Professor of Industrial Medicine.

In announcing the new Institute Dean Currier McEwen, of the New York University College of Medicine, said the Institute will offer training for both professional and lay workers, and will award appropriate degrees. There will be in operation in conjunction with the Institute a new general group practice clinic, staffed by members of the College faculty. The general clinic will be in operation by next Fall, offering to wage earners comprehensive medical care.

He added that there will also be offered a graduate program, not only to qualified physicians, but to others wishing to specialize in the field. The Institute will also offer industry special services covering research in Toxicology, Physiology, worker psychology, and Tropical Medicine.

Dean McEwen announced that Dr. Lanza will give voluntarily half-time service until the end of 1948, after which he will be able to devote his full time to the new program of the College of Medicine. He will act as co-Director of the Institute with Dr. Henry E. Meleney, Professor of Preventive Medicine.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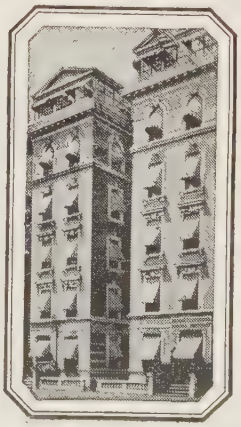

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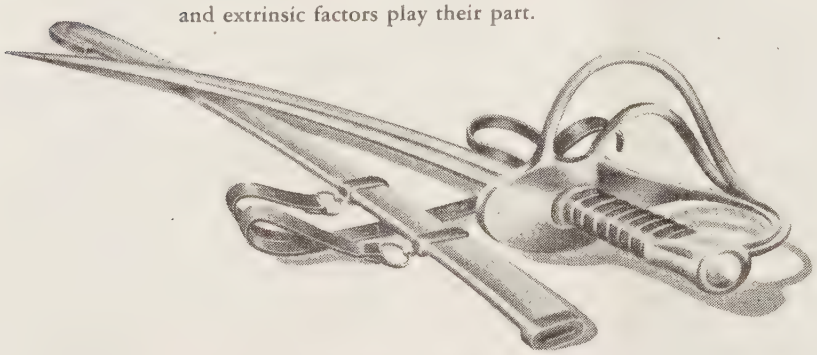

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Veterans Administration Central Laboratory

Establishment of a central laboratory for pathology in Washington, D.C., in cooperation with the Army Institute of Pathology, was recently announced by the Veterans Administration.

The laboratory will provide a consultation, review and diagnostic service in pathologic tissues for the VA's one hundred and twenty-six hospitals and other medical facilities.

In addition, VA pathologists will cooperate with the Army, civilian medical societies and others in maintaining a central file of pathologic anatomy and related records for reference, research, training and long-range follow-up programs.

The joint laboratory will also provide instruction in pathologic anatomy and histopathologic techniques for VA pathologists and technicians, within the limits of available facilities; conduct research in the pathology of diseases and cooperate with similar research programs of the Army Institute of Pathology, and provide study and review material in the form of study sets, atlases and clinico-pathologic conferences which will be equally valuable to both laboratory and clinical services in their teaching and training programs.

It is planned that branch reference laboratories, to be established in each of VA's thirteen branch offices at a later date, will maintain consultation and training services in pathology for VA hospitals and

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other medical facilities within their respective areas.

The histopathologic sections of these reference laboratories will also assist in screening materials being forwarded to the central laboratory in Washington, D.C.

Effects of Climate on Cancer

In an address delivered before the alumni of the University of California College of Dentistry in San Francisco, Lt. Colonel Joseph L. Bernier, director of the dental division, Army Institute of Pathology, reported that one of the chief indications that extremes of climatic heat and cold may have something to do with the occurrence of cancer, was revealed in the high percentage of lip cancer found in World War II soldiers who were stationed in hot, windy and dusty areas of the southwest United States and Africa.

Medical records also indicate, he added, that lip cancer occurred more often among troops stationed in the colder parts of Alaska than in the more temperate areas. Statistics indicate that 90 percent of these malignancies occur in men chiefly on the lower lip and only 10 percent on the upper lip. For the same disease among women only 60 to 70 percent of the growth appeared on the lower lip and the other 30 to 40 percent on the upper lip. Since a protruding lower lip is more common among men than among women, Colonel Bernier stated, these figures suggest that the greater extent of exposure to weather extreme was a possible causative factor.

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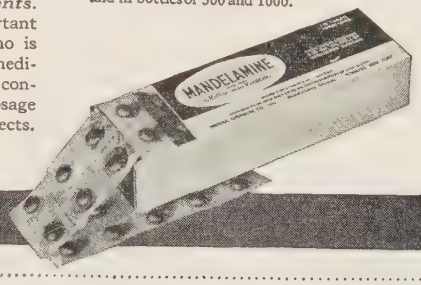

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New Methods for Treating Polio

New methods of treating bulbar poliomyelitis, the usually fatal form affecting the medulla (base) of the brain and responsible for almost all deaths occuring in polio, were graphically presented to the nation's physicians in a University of Minnesota exhibit at the centennial celebration of the American Medical Association in Atlantic City.

Last summer's epidemic of poliomyelitis, largest since 1916, which attacked 25,191 persons throughout the nation with 2,875 cases occuring in Minnesota alone gave University doctors opportunity for an actual clinical trial of the new treatment methods. Preliminary experiences at that time of 183 patients suffering from bulbar polio in Minneapolis were highly satisfactory, materially reducing number of deaths from the usually fatal disease. University doctors believe that further refinements of treatment may lead to still greater reductions in deaths.

Formerly regarded as a general infection of the medulla (the base of the brain), bulbar poliomyelitis, according to the Minnesota exhibit, may affect distinct areas in this region, giving rise to different symptoms, each of which may require specific treatment procedures. There may be, however, in many cases no exact division, but a merging of several types of infection. The five categories of bulbar polio, as depicted in the exhibit, are:

1. *Cranial Nerve Nuclei Type.* These nerves, located in the medulla (bulb) of the brain control the muscles of face and throat. This type of virus infection may cause difficulties in swallowing, causing mucous and other material to obstruct the air passages.

2. *Respiratory Center Type.* Also located within the bulb, this particular area controls the rate of breathing. Patients with this type of bulbar polio lose control of the rhythmic rate of respiration. As a result they do not get sufficient oxygen in the blood. Body cells, especially those of the brain, require certain, regular amounts of oxygen to maintain life. Disturbances of the oxygen supply may mean rapid death.

3. *Circulatory Center Type.* The bulb also contains an area which controls the rate of blood flow. When this circulatory center is attacked by the polio virus, patients suffer changes in the pulse rate, rapid fall of the blood pressure and exhibit the general symptoms of persons in shock.

4. *Encephalitic Type.* Many patients with involvement of the bulb of the brain show signs of confusion, apprehension and anxiety. These symptoms are chiefly due to the lack of oxygen in the brain. Only rarely is there actually virus infection of the cortex (rim) of the brain producing these typical encephalitic symptoms.

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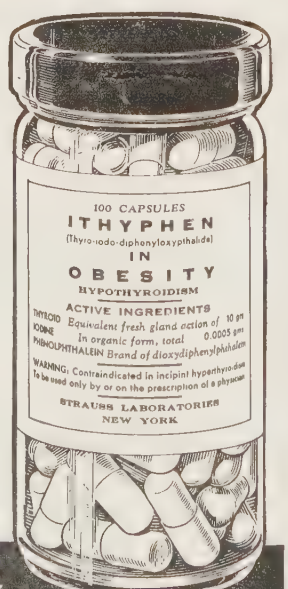

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5. *Bulbar-Cervical Spinal Type.* In many patients there may be involvement of the medulla and the adjacent areas of the spinal cord, termed the cervical level. These patients may have a mixture of the above symptoms and in addition may show paralysis of the muscles of the upper torso, especially those of the chest controlling respiration.

According to the symptoms of the patient which indicate the type of bulbar polio, the exhibit, through use of three-demensional sculptures and color films, indicates the specific treatment to be used. Such measures may include nasal tube feeding, tracheotomy and oxygen therapy. The purpose of the tracheotomy is to maintain an open airway and to assure adequate oxygen therapy.

Another treatment innovation presented graphically in the exhibit is the oximeter, an electronic device which is clipped on the patient's ear and immediately records the amount of oxygen circulating in the bloodstream. First developed by the Army Air Forces to combat oxygen lack in high altitude flying, the oximeter provides an immediate record of blood oxygen level before clinical symptoms of oxygen lack can be observed in the patient. If the oximeter records a fall in oxygen content, a humidified mixture of oxygen-helium is administered directly to bring the level to normal.

Sugar Research Awards

Dr. Harlow Shapley, chairman of the national science fund of the National Academy of Sciences, recently announced that scientists of all countries have been invited to compete for prizes totaling $40,000 posted by the Sugar Research Foundation.

Established to stimulate scientific studies of sugar as a food and an industrial raw material which may lead to its greater usefulness, awards of $5,000 will be given in 1947, 1948 and 1949; with a grand prize of $25,000 to be given in 1950 for the most significant discovery of the preceding five years. Winners of the preliminary awards are also eligible for the grand prize.

In announcing the rules governing the award program, Dr. Shapley reviewed the research work of the Sugar Research Foundation. At the present time, under Dr. Robert C. Hockett, scientific director, forty-four projects dealing with the physiological, chemical and industrial aspects of sugar and its derivatives are being sponsored at universities by means of grants-in-aid amounting to more than a half a million dollars. In addition, the foundation has been engaged, since its formation in 1943, in the task of collating the existing information about sugar, and in a series of scientific reports, making it available to technicians and others who have a special interest in the subject.

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Prevention of Tuberculosis

New York is the first state to develop plans for the production and use of BCG (Bacille Calmette-Guérin) vaccine for the prevention of tuberculosis. The State Department of Health several months ago engaged the services of Dr. Konrad Birkhaug, formerly of Norway, an international authority on the manufacture and use of this vaccine, who is now working under the general supervision of Dr. Gilbert Dalldorf, director of the Division of Laboratories and Research.

Reports from this country and abroad indicate that the degree of protection against tuberculosis produced by BCG is quite high, although not complete.

Plans are being developed jointly with the Council Committee on Public Health and Education of the Medical Society of the State of New York for the appropriate distribution and use of the vaccine. At the outset, a limited number of physicians will be trained in its use and its administration to only selected groups of the population will be considered, particularly those who work or reside in an environment where they are intimately exposed to the disease. Persons already infected by the tubercle bacillus are not suitable for vaccination; the vaccine can be given only to those who have never been so infected.

Although reports indicate that the number of cases of tuberculosis and of deaths from this disease is considerably smaller among the vaccinated persons than among those not vaccinated, the vaccine should not be considered a substitute for prompt and adequate segregation of infectious cases of tuberculosis. Moreover, the lasting effect of this safe method of vaccination cannot be determined until more research has been done. The State Department of Health is planning to carry on such research as a part of its expanded tuberculosis control program.

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NEW PRODUCTS

Diathermy

The new Burdick X 85 diathermy has been approved by the F.C.C. It operates on the assigned frequency channel of 13.660 m.c. (approximately 22 meters). This frequency channel was chosen because it is the most efficient frequency for electro-magnetic induction type heating of tissue using drum and cable application. Adaptation for minor surgery can also be provided.

The frequency of this diathermy is controlled by the oscillating quartz craystal. With a crystal, it is possible to control the frequency within a band width of plus or minus 0.05 percent, and maintain the frequency indefinitely regardless of how the controls are operated, or what application is made to the patient. Harmonic and spurious radiations in this unit are suppressed to a point well below the allowable limit of 25 microvolts per meter at a distance of 1,000 feet.

Motion Sickness Remedy

A new prescription specialty for motion sickness has been announced by Winthrop Chemical Company, Inc., of Rensselaer, N. Y., and New York City. The Winthrop product, the first of its kind on the company's long list of medicines, has been stocked and tried for clinical evaluation on major steamship and air lines with more than 80 percent of the motion sick travelers studied obtaining relief. It is a mixture of scopolomine, luminal and atrophine. Scopolomine and atrophine are known to produce the best clinical results in counteracting the physical effects of unaccustomed motion, while luminal, through its calming effect allays the apprehension and excitement which contribute to sea and air sickness.

Treatment for Capillary Fragility

Tablets Rutin, a product for the treatment of increased capillary fragility have been released nationally by Sharp & Dohme, Inc., Philadelphia.

Rutin, extracted from the stems, leaves and flowers of young buckwheat, has demonstrated particular effectiveness in treatment of increased capillary fragility, an abnormality associated with hemorrhagic conditions and certain types of hypertensions. It is of benefit in treatment of hemorrhagic conditions due to capillary rupture and increased capillary fragility due to thiocynate therapy and is useful also when administered concomitantly with other drugs known to increase capillary fragility.

Average dosage for Rutin is 20 mg. three times daily (three 20 mg. tablets). Severe cases of increased capillary fragility require 40 mg. three times daily (six mg. tablets). Supplied in 20 mg. tablets in bottles of 100 and 1,000.

Furacin in Solution

Eaton Laboratories, Norwich, N. Y. have made Furacin, the new topical antibacterial agent, available in solution form to hospitals and pharmacies for filling prescriptions. It is supplied in 4 oz. and 16 oz. bottles. Furacin Solution is designed chiefly for use on wet dressings. It is yellow in color and is slightly hypertonic. All ingredients are stable at room temperature. The wetting agent, by reducing surface tension, facilitates penetration of small fissures. Furacin's antibacterial activity is such that it need not be autoclaved before use.

New Vitamin Product

A new vitamin product, Lyo-B-C principle B-complex factors with ascorbic acid, has been released by Sharp & Dohme, Inc., Philadelphia.

Feature of this new preparation is preservation and prolongation of vitamin activity by the lyophile technique. This product is for the parenteral treatment of vitamin B-complex and ascorbic acid deficiency states: interference with absorption and ingestion, increased metabolism, psychiatric use, debilitated states, addition to infusions, wound healing.

Daily dosage, intravenously; the contents of one vacule vial restored to 5 cc., or added to intravenous infusion. Daily dosage, intramuscularly; the contents of one vacule vial restored to 2 cc. Supplied in a vacule vial with a 5 cc. vial of distilled water, sterile, or in 25 5 cc. vials of dried material with 5 25 cc. vials of distilled water, sterile.

Ultracain Ointment

Chatham Pharmaceuticals Inc., of Newark, N. J., a member firm of the American Pharmaceutical Manufacturers' Association reports a new preparation for topical use wherever an anesthetic, bacteriostatic and fungistatic oitment is indicated, bringing rapid relief from pain, itching, and burning and accelerated healing of open cutaneous lesions with no reactions of either primary sensitization or hyperallergization to any of its active ingredients.

Principle indications for Ultracain Ointment cited by the manufacturer include burns, nonspecific dermatitis, puritus ani and vulvae, fissures, hemmorrhoids, cutaneous ulcers, etc.

The sodium propionate in the formula provides bacteriostatic and fungistatic action to protect the lesion from secondary invaders. The combination of amyl and ethyl para-amino-benzoate esters gives maximum local anesthetic with a minimum dose. Cod liver oil is included for its established propensity for promoting and accelerating healing. Supplied in 1 oz. tubes with applicator and 1 lb. jars, by Chatham Pharmaceuticals, Inc., Newark 2, N. J. Fisher and Burpe, Ltd., Winnipeg, Man., Canada, is the Canadian distributor.

Synthetic Garlic Antibiotic

Synthesis of the active antibiotic principle discovered in common garlic has been achieved for the first time at the Sterling-Winthrop Research Institute, Rensselaer, N.Y., Dr. L. D. Small, senior investigator, revealed in a paper presented at the 111th annual convention of the American Chemical Society.

The resulting series of new synthetic compounds, called alkyl thiosulfinates, "may be modified in structure in such a manner as to produce desired increase in activity against certain microorganisms not now controlled by the sulfanilamides or penicillin", Dr. Small said. Increased activity, for instance, was noted against microorganisms producing athlete's foot, ringworm, and a variety of other infections, Dr. Small said.

"The new synthetic compounds, alkyl thiosulfinates, are much more stable than the natural garlic antibiotics and in several instances are also more powerful", Dr. Small continued. "The interesting feature in these compounds is that they illustrate a new key chemical structure which, when included in a large number of types of chemical compounds, imparts to them fundamental antimicrobial activity. How valuable they may be from a practical standpoint depends upon results of further biological testing."

In his investigations at the Sterling-Winthrop Research Institute, Dr. Small was associated with Doctors J. H. Bailey and C. J. Cavallito. The Institute first isolated the active antibiotic substance in garlic and elucidated its chemical structure in 1944. Several properties of the natural product were unsatisfactory, notably the very low stability of the material.

Dr. Small explained that methods were investigated for preparing the garlic antibiotic and related substances synthetically in the laboratory.

"A satisfactory method for the preparation of this new class of organic chemical compounds has now been devised", he concluded. "Besides the naturally occurring antibiotic, several other new compounds have been synthesized and all have been found to be active in preventing growth of bacterial and killing molds."

Microscope Lamp

The Clay-Adams Company., Inc., New York, N. Y., has introduced the E & G Microscope Lamp which is said to be a highly efficient, low cost microscope lamp which will serve requirements for precise transmitted dark field or oblique illumination in microscopy, photography, macrophotography, and low power micro-projection. It utilizes brilliant 6.5 volt 2.75 ampere automobile headlight type of bulb to give a high intensity, point source of illumination. It has an adjustable iris diaphragm and the light source can be adjusted to give critical (Koehler) illumination.

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Benzedrine Sulphate Capsules

Benzedrine Sulfate Capsules, a new oral dosage form of Benzedrine Sulfate, has been introduced by Smith, Kline & French Laboratories, Philadelphia. Each capsule contains racemic amphetamine sulfate, S. K. F., 5 mg. and may be prescribed in place of the tablets when, for any reason, an alternate dosage form of Benzedrine Sulfate is desirable. The capsules are available in bottles of 50 on prescription only.

New Mucilose Formula

According to Frederick Stearns & Co. Division, Sterling Drug Inc., a new formula for Mucilose rendering this bulk laxative more palatable and still easier to take, is now being introduced through retail drug stores.

The product which comes in flakes and granules in 4-ounce and 16-ounce containers is pleasantly flavored and prepared from psyllium with an equal amount of dextrose. It has the ability to absorb almost one hundred times its weight of water.

Streptomycin

Merck & Co., Inc., announce the development of a new highly-purified form of streptomycin, Streptomycin Merck (Calcium Chloride Complex). A white, finely-divided substance close to chemical purity, its outstanding advantage over streptomycin salts hitherto commercially available is reported to be the reduction of pain on injection. Clinical studies have also indicated that this new pure form diminishes side reactions sometimes found with the earlier compounds.

Hypochromic Anemia

Roche-Organon Inc., of Nutley, N. J., announces Cytora, a new specialty for the treatment of hypochromic (iron-deficiency, microcytic, secondary) anemia.

Cytora, a balanced combination of folic acid, iron, liver, vitamin C and 5 B-complex factors in a single tablet, is designed to eliminate multiplication of medication, reduce cost of therapy, and minimize inconvenience to the patient. The vitamins in each tablet become available shortly after ingestion; the iron and liver become available in the duodenum and upper jejunum, assuring optimal absorption and avoiding gastric disturbances. Cytora is indicated for hypochromic anemias: Anemia of blood losses (surgery, peptic ulcers, bleeding hemorrhoids, carcinoma of the stomach or bowel, ulcerative colitis, tuberculosis, hookworm infestation, amebic dysentery and purpura), nutritional anemia, anemia of pregnancy and lactation, anemia in the aged anemia of hypermenorrhea, anemia of childhood, postinfectious anemia, convalescence and general debility. Recommended daily dose 6 tablets. Available in bottles of 100, 250, and 1,000 tablets. Professional trial supply furnished upon request.

Bunesia

A new, antispasmodic, sedative, antacid—Bunesia—is being introduced by McNeil Laboratories, Inc., Philadelphia, to the medical profession.

Bunesia combines—antispasmodic: hemotropine methylbromide (1/24 gr.): antacid: magnesium hydroxide (5 gr.) and sedative: butisol sodium (1/3 gr.).

The combination of these three ingredients offers a three-way action in gastrointestinal disorders for which it is indicated — peptic ulcer, pylorospasm, gastric neurosis, chronic constipation, irritable colon, etc.

It is available in bisected tablets for divided dosage in bottles of 25, 100, 500.

Mulsavite Capsules

Mulsavite Capsules, a therapeutic multivitamin product providing five times the F. D. A. recognized minimal daily vitamin requirements is announced by Sharp & Dohme, Inc., Philadelphia.

By increasing the daily dosage or by varying the frequency of administration of Mulsavite Capsules, the physician may prescribe any multiple of five times the minimal daily requirements. Supplied in bottles of 30 and 500 capsules.

Sympatol Ampul Form

Frederick Stearns & Co. Division, Sterling Drug Inc., who are now offering Sympatol in ampul form, in addition to tablets for oral administration, describe their product as a sympathomimetic amine, structurally similar to epinephrine, but more stable considerably less toxic, and more selective in pressor action.

For parenteral use, this prescription specialty pressor tonic comes in 6 percent solution of 1 cc. (60 mg.) ampuls in boxes of six. Tablets are available in 100 mg., in bottles of 50, and also a 10 percent solution (oral) (100 mg. per cc.) bottles of 30 cc.

Oral Treatment for Macrocytic Anemias

Sharp & Dohme, Inc., Philadelphia in announcing the national release of Tablets Folic Acid for oral treatment of macrocytic anemias state that this newest and most recently synthesized member of the vitamin B-complex has demonstrated remarkable effectiveness in treatment of macrocytic anemias. When administered orally, folic acid will influence anemia in a manner comparable to parenteral liver therapy, but without development of sensitivity frequently encountered with such therapy. Moreover, because it may be administered orally, folic acid is useful in treating patients who require intensive antianemia therapy, thus obviating frequent painful injections of potent liver extract. Tablets Folic Acid are indicated in treatment of nutritional macrocytic anemia and the macrocytic anemias of pernicious anemia, sprue, and pregnancy. Supplied in 5 mg. tablets in packages of 100 and 1,000.

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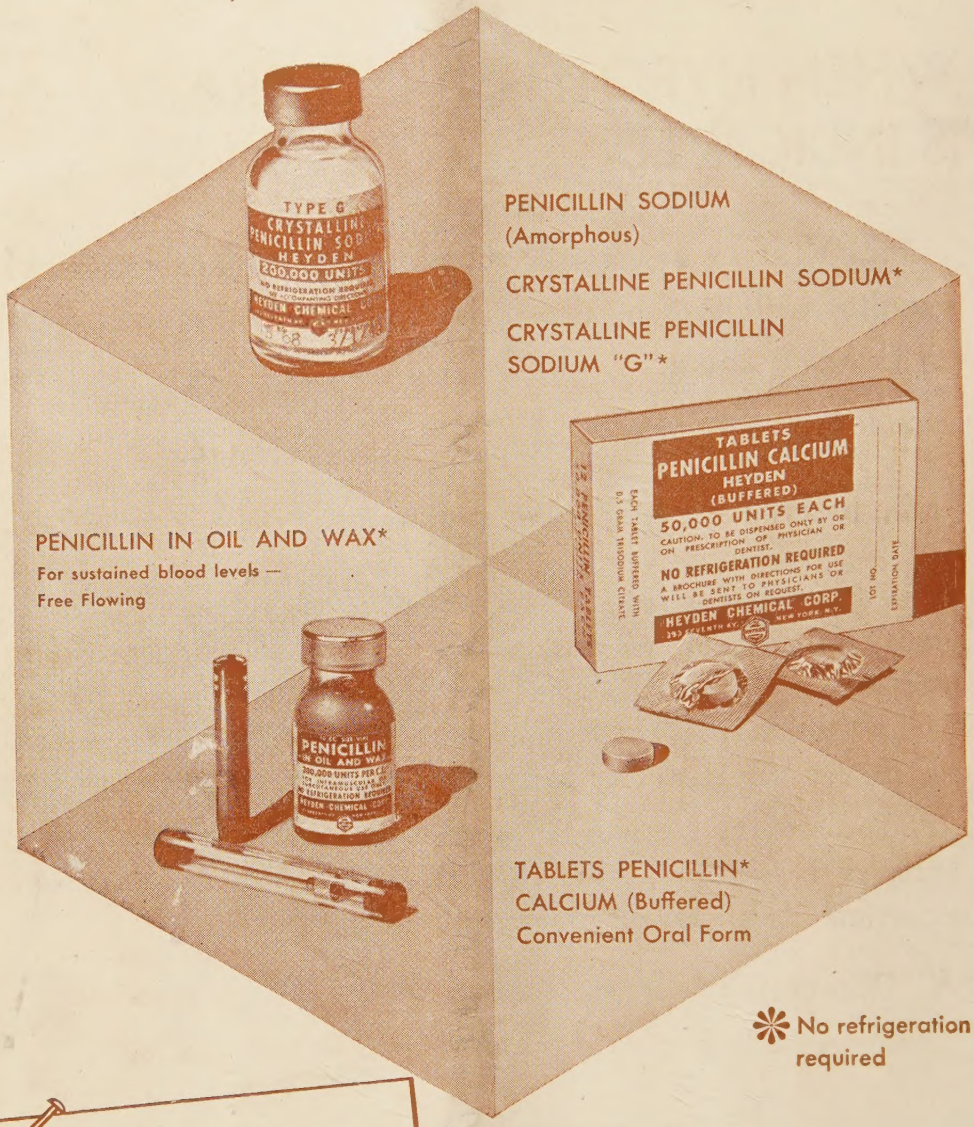

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